

BOOK REVIEWS

Sjæk'len 1991: Årbog for Fiskeri- og Sofartsmuseet [1991 Yearbook of the Fisheries and Maritime Museum]. Esbjerg, Denmark: Fiskeri- og Sofartsmuseet, 1992. 144 pp., maps, figures, tables, photographs, bibliographies, English summaries. D.Kr. 148, hardback; ISBN 87-87453-58-4.

Subscribers to *The Northern Mariner/Le Marin du Nord* with an ability to read Danish (and it is difficult to avoid the conclusion that we are few enough in number to all fit comfortably into a mini-van) will no doubt be pleased to note the release by the Danish Fishery and Maritime Museum in Esbjerg of another volume of *Sjæk'len* (the Shackle). Morten Hahn-Pedersen, the museum's director, has here brought together an interesting ensemble of articles on a wide variety of subjects, united by an institutional commitment to good public history. It is an eclectic, generally pleasing mix of good scholarship, local history and journalism, for which the publisher has very thoughtfully provided an English summary for each article.

For Canadians, by far and away the most interesting article is Hahn-Pedersen's investigation of the rise and fall of a remarkable fleet of sailing merchant ships, based on the island of Fane at the end of the nineteenth century. The study addresses the basic issues of technological change, markets and capital in a manner that immediately recommends itself to any reader interested in the history of Atlantic Canada's fabled nineteenth century merchant sailing fleet. The differences between the Danish and the Canadian stories are obvious enough, yet as a case study, the story of the Fane fleet provides an interesting and informative comparative history.

The allure, cost and consequences of technological change and adaptation is the theme of Poul Holm's contribution dealing with the early efforts at building a fleet of Danish steam trawlers for the Icelandic fishery. For general readers, the main interest rests in the way in which the financial failure of this early endeavour contributed to the development of an owner-operated, small scale, cooperative trawler fleet in Denmark.

Other papers in *Sjæk'len 1991* are more parochial and less scholarly. We have an account of one man's experiences carrying fish by truck to Nazi Germany in the 1930s and 1940s; the story of the *Dagmar Aæn*, a traditional wooden Danish cutter, retired from fishing, refitted and then set on a course of adventure circumnavigating the world north of the continental land masses; and finally two shorter pieces dealing with ecological issues: one derived from a current exhibit on whales at the museum, another based on the controversy surrounding the discovery and study of two hundred dead porpoises on the west coast of Jutland in 1991. The volume concludes with a report on the year's activities and accomplishments at the Fishery and Maritime Museum.

What kind of year was it? According to Hr. Hahn-Pedersen, 1991 was made memorable by the high degree of media attention that museum activities and accomplishments received. Memorable, yes, but in his foreword, Hahn-Pedersen is quick to place this triumphal declaration within what, in the museum world, has become an all too familiar context of quiet concern. This is apparent in his politically careful mention of the constant pressure and expense of essential, behind-the-scenes museum work. Implicit in this dis-

cussion is the tension resulting from the need to finance and fulfil these basic responsibilities while also sustaining viable hopes for future growth and expansion. This problem is real and widely felt, and while Scandinavian museum yearbooks like *Sjoek 'len* constitute a proud, enviable tradition, the economic and political forces at work in museums today are as corrosive of such traditions as the North Sea is of the Jutland's renowned western shore.

Garth Wilson
Ottawa, Ontario

Henry C. Whyman. *The Hedstroms and the Bethel Ship Saga: Methodist Influence on Swedish Religious Life*. Carbondale, IL: Southern Illinois University Press, 1992. xvi + 183 pp., illustrations, notes, index. US \$19.95 (+ \$2.50 postage & handling), cloth; ISBN 0-8093-1762-1.

This book is unique in focus and fills a long felt need. However, for those unfamiliar with the fascinating early history of the Seafarers' Mission Movement, the title might convey the notion that there was only *one* "Bethel Ship." In actual fact, the whole saga began with the birth of the so-called Bethel Movement and the unfurling in 1817 of the first Bethel Flag on the waters of the River Thames. Thereafter, the word "Bethel" rapidly became a generic term for organizations and facilities for mission to seafarers throughout the world. Such facilities might be shore-based buildings (often simply called "Bethels") or, frequently, as in the case of the subject of this book, refurbished hulks (or "Bethel Ships") conveniently moored as floating chapels in major seaports.

Provided this wider context is clearly understood, the title is in this case nevertheless well warranted. For here, beginning with a battered old brig moored on Manhattan's West Side in the mid-1840s, emerged a Bethel Ship ministry with a difference—destined to create dramatic waves far beyond the shore-

line, in church, maritime and immigration history. Henry Whyman deserves high praise for this first well-documented, eminently readable biographical treatment of both the legendary founder of that ministry, Olof Gustaf Hedstrom, and his brother and mid-western fellow-worker Jonas.

In the course of twelve chapters, Whyman covers the colourful career of the key player in this drama, Swedish-born Olof Gustaf Hedstrom (1803-1877), from his early years as a stranded, mugged mariner, then a circuit-riding Methodist preacher, and on to his life-calling as "Captain" of the Bethel Ship *John Wesley* at Pier 11 North River (as the Hudson River was then called). Although begun as a ministry mainly to foreign and especially Scandinavian seafarers, congregating in that part of New York Harbor, Hedstrom and his colleagues soon saw it as a clear case of providence that such a strategically situated mission should be established so shortly before immigration from Scandinavia started on a massive scale. As crowds of confused and often abused Scandinavian immigrants poured in during the decades which followed, their ever-friendly factotum fulfilled the functions of employment agency, post-office, interpreter, missing persons bureau, travel agency and counselling centre.

Not surprisingly, multitudes of both seafarers and immigrants, disillusioned with Lutheran state-church formalism, responded warmly to the hearty Methodist revivalism of this latter-day Good Samaritan. The book goes on to break new ground in tracing the fascinating links between the native Swedish "Làsare" or Pietist Movement and Hedstrom's Bethel Ship ministry. The final four chapters are devoted to the very divergent directions in which the Bethel Ship brand of populist piety subsequently went. First (and for the most part), there was the steady stream of spiritually awakened Scandinavian immigrants, heading West to claim their land of promise, meanwhile reinforcing the ranks of Scandinavian-American Methodism, largely in response to the follow-up ministry of Jonas, Olof

Hedstrom's Illinois-based brother and shore-side counterpart. Simultaneously, there went out from the Methodists' Manhattan Bethel Ship as well as its Brooklyn-based successor, a committed core of converted Scandinavian sailors, bent on bringing their new-found faith back to their respective fatherlands, by a process of re-migration. Here they actually planted the seeds of Scandinavian Methodism, thereby vindicating the oft-repeated contention of the pioneer advocates of maritime mission, that seafarers, once committed to Christ, had ever since the Master's call on the shores of Galilee, always made the most effective missionaries.

In terms of placing the history of Hedstrom's Bethel Ship ministry in the context of American immigration history, with special reference to his mid-nineteenth century Swedish fellow-ethnics, it is doubtful if any could surpass Whyman, with his exceptional qualifications. However, no similar attempt is made to see the dramatic saga of this particular Bethel Ship in the context of the early Bethel Movement as such, much less the wider history of the Church Maritime, where it undeniably also belongs. As to the use of "floating chapels," only one (not "several") had been opened in American ports by June 1845, in contrast to the case in the United Kingdom and elsewhere. (It seems likely that the main body of the book was completed before the 1986 publication of this reviewer's dissertation on the origin and early growth of the Seafarers' Mission Movement).

Furthermore, Whyman accepts without reservation the traditional dating of the commencement of Hedstrom's Bethel Ship ministry, viz. May 25, 1845, despite the far stronger primary source evidence for June 8, 1845 (as presented in "The Bethel Ship *John Wesley*," *Methodist History*, July 1977, p. 220). Finally, for whatever reason (possibly space?), Whyman chooses not to discuss a remarkable long-term consequence of the superlative success of the Methodist Bethel Ship Mission in New York—its provocative effect on the established Lutheran churches of

the Nordic nations, who eventually felt compelled to launch their own seafarers' and immigrant missions on the Atlantic seaboard.

Nevertheless, none of this must be allowed to detract from the brilliance of Whyman's contribution to our understanding of a ministry which remains unique in the annals of both immigration and maritime mission history. As such, the saga of the Hedstrom brothers and a certain Bethel Ship in nineteenth-century New York, which for years sailed no further than her own hawser, will for ever retain a secure place in the history of human mobility, or "People on the Move." And a substantial part of that credit must go to Henry Carl Whyman.

Roald Kverndal
Seattle, Washington

Martin Dean, Ben Ferrari, Ian Oxley, Mark Redknap and Kit Watson (eds.). *Archaeology Underwater: The NAS Guide to Principles and Practice*. London: Nautical Archaeology Society and Archetype Publications, 1992. x + 336 pp., illustrations, bibliography, index. £25, soft-bound; ISBN 1-873132-25-5.

For years, sports divers have been offered introductory courses in underwater archaeology, largely in attempts to divert them from salvaging souvenirs from heritage wreck sites. Some excellent programmes have been developed but we have never had the support of a textbook that went beyond a superficial overview. Now the Nautical Archaeology Society, whose training scheme is the international standard, have filled the gap. Little can be said of *Archaeology Underwater* except that it fulfils its purpose superbly.

It covers all of the expected topics, from research logistics through surveying techniques and underwater search and excavation methods to academic publication and heritage management. The editors personal interests in site environments and the application of "archaeological science" are well handled. Field stabilization of artifacts is discussed but

laboratory conservation is properly left to specialists. The need to protect heritage resources is stressed throughout and the editors espouse the same high standards of care and precision in underwater work as would be demanded in land archaeology. The book is particularly strong in two critical areas: the principles of archaeology, whether wet or dry, and those of academic research. For the former, a topic that few divers will explore elsewhere, it provides a thorough introduction. Research is an activity that comes naturally to many readers of this journal who absorbed its fundamentals during years of higher education. As one who has attempted, in a single lecture, to instil in a class of sport divers such niceties as the primacy of data over interpretation and the need to frame research questions before gathering those data, I can confirm that this is the hardest part of an underwater archaeology class to teach. *Archaeology Underwater* covers the ground masterfully. The book is rounded-off with an extensive and up-to-date bibliography, enhancing its value for practising professionals.

This is, however, a course textbook rather than a reference manual. It does not provide enough information for the reader to carry out even the simplest of tasks, such as an underwater search, without further guidance. There is, for example, an ample account of the types of information that can be extracted from artifacts but (apart from an appendix on guns) nothing here that would allow a diver to determine even the approximate date of a site from the material visible there. Moreover, there is nothing on the past successes and failures of underwater archaeology; these are topics that are extensively covered in semi-popular works but nevertheless ones that the neophyte should ponder with care. There are remarkably few errors, though the editors should note that echo sounders do not emit "electromagnetic" pulses, (p. 140) also that large guns on pivot mountings were not "swivels," could not be operated by one man and were not breech-loaded, (p. 320)

This book should be required reading for all budding underwater archaeologists and for other divers with pretensions to that status. It is densely packed with information but is clearly written and has well-chosen illustrations that help guide the reader through sometimes complex concepts. Many points are reinforced by Ferrari's entertaining cartoons.

Trevor Kenchington
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Alexander McKee. *How We Found the Mary Rose*. London: Souvenir Press, 1982. 152 pp., photographs, colour plates, figures, maps. ISBN 0-285-62524-1, cloth; ISBN 0-285-62544-6, paper.

Finding an unexplored shipwreck is every wreck diver's dream. Finding a shipwreck complete with fittings, hull, cargo, provisions, all beautifully preserved, is every underwater archaeologist's fantasy. Proving a historic legend is every historian's vision. The late Alexander McKee—diver, archaeologist, historian-lived that dream and fantasy and proved his vision. After years of research and hundreds of dives, he found Henry VIII's flagship *Mary Rose*. Few believed that much, if anything, remained from the 1545 wreck; most thought it would be impossible to find. Without McKee's drive and research skills the *Mary Rose* would have remained an historical footnote. Through his efforts the ship was found, volunteers went into action, substantial funds were raised, and a vast invaluable time capsule of sixteenth-century English life was raised, preserved, interpreted and displayed. Diving, archaeology, and maritime history owe Alexander McKee much.

How We Found the Mary Rose is written nine years after McKee's 1973 book, *King Henry VIII's Mary Rose*. The earlier book concentrated on the history of the ship, the search and the discovery in the late 1960s through to limited excavations of 1971-72. *How We Found the Mary Rose* retells the material covered in the earlier book, enhanced

by colour photographs, and then details the exciting finds of the excavations in the years 1973-1982. The book ends with a short epilogue describing the thrilling raising of the hull on 10 October, 1982.

The first half of the book is also as much a history of diving and salvage as of anything else. Through the story of the *Mary Rose*, McKee relates the history of modern diving, from the efforts at salvage by diving bell in 1545-1549 to the pioneer hard hat salvage efforts of John Deane in 1836-1840. In his own way, McKee was just as much of a pioneer as Deane. He teamed with Harold "Doc" Edgerton to search for the *Mary Rose*, using Edgerton's then novel sub-bottom profiler equipment. These efforts, together with the discovery of the *Mary Rose*, compelled the British government to deal with submerged cultural resources. Since technology and simple slogging had now exposed what lay on and under the sea floor, the state could no longer ignore what lies underwater.

McKee also teamed with Prince Charles, Dt. Margaret Rule and others to protect the *Mary Rose* and its enormous wealth of artifacts. Some artifacts are detailed in this book, but only from the standpoint of what was found, by whom and when; there is little interpretation. This is unfortunate, because the artifacts present a wonderful story of sixteenth-century naval life. That, however, is not McKee's purpose here.

The raising of the hull of the *Mary Rose* is a dramatic tale in its own right. There had been much speculation and worry that the support cradle would crush the hull and, as it turned out, part of the cradle collapsed during the lift. Yet the drama of that event is confined to a few pages told in pictures and a matter-of-fact style. To McKee, the lift was almost anti-climactic; for him, the drama lay in the search and the discovery, and it is to the search and the diving efforts that much of the book is devoted.

There are lots of anecdotal comments from divers; these are interesting, but add little to the information about the *Mary Rose*

site. Many of the photographs concern the diving operations; these are amateur shots, with the result that some have marginal value, particularly since visibility at the wreck site was so poor. The book has no index, no footnotes, and no bibliography, though it must be conceded that McKee did not set out to write an academic work. Rather, it is a testimonial to the hundreds of volunteers who made the project happen.

The book ends with the lift. It does not chronicle the enormous preservation efforts, or the wealth of information from the artifacts, or even the huge tourist draw that the ship and its artifacts have become. That information, or an update, would greatly enhance what is, in the end, a fascinating diver story.

Thomas F. Beasley
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National Historic Sites. *The Wreck of the Auguste*. Ottawa: Canadian Parks Service, 1992. 70 pp., maps, illustrations, appendix. \$9.95, paper; ISBN 0-660-14562-6.

The public seems to have an inordinate fascination with disaster stories and as unfortunate as they are at the time for the people involved, disasters at sea, whether caused by military action, accident or weather, provide one of the few sources of primary material available to historians. In effect, time can stand still on the seabed.

The story of *Auguste* is one such disaster story. She was a French merchant ship of 245 tons that was captured by the British in 1756. She then worked in the Caribbean until 1761 when she was put into service as a cartel ship, that is, a passenger vessel equipped to transport unhappy Canadians who had served in the French military during the Seven Years' War to Europe along with their families. *Auguste*, with 121 people aboard, seventeen of whom were crew members, left Quebec too late in the season and after a tempestuous month at sea, ran aground and broke up in

Aspy Bay, Cape Breton Island, causing the death of 114 people. *The Wreck of the Auguste* tells this story and goes on to describe the fate of the seven survivors, notably that of St-Luc de La Come, an eminent Canadian.

Much of this book is devoted to the life of La Come, along with the lives of some of his fellow passengers and we are given a look at some of the political and economic conditions of the time as background to the story of the wreck. Thus, we have a glimpse at the social situation in New France and then of British North America during British martial rule. Further, the all-important artifacts taken from the site are presented in the book by photographs, some of which are in colour, and their functions are explained with sketches and reproductions of contemporary drawings. Items from the ship proper and personal belongings of the passengers are both illustrated here and the visual presentation of the book makes its price seem modest.

The wreck site, discovered in 1977, may be familiar to historians and archaeologists, but *Auguste* is not well known to the public. Clearly, this booklet was published to broaden general knowledge on this subject and in its concise format it undoubtedly will. One hopes that it will generate further interest in this important Canadian archaeological find.

John McKay
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Fred Rogers. *More Shipwrecks of British Columbia*. Vancouver: Douglas & McIntyre, 1992. xiv + 241 pp., index of wrecks, index of captains, fold-out map. \$19.95, paper; ISBN 1-55054-020-3.

This volume is a follow up to an earlier book, *Shipwrecks of British Columbia*, in which veteran diver Fred Rogers recounted over one hundred British Columbia marine disasters. The two volumes are organized as shipwreck encyclopedias and the writer has kept the mariner, as well as the recreational diver, in

mind with his layout of both books. Chapters are organized according to waters, such as Lower Fraser River and Sandheads, The Strait of Georgia, and so on, with the area's shipwrecks then recorded in chronological order within each chapter. If one is cruising a particular locale and curious about the wrecks, it is a simple matter to refer to numbers on the enclosed chart to see what is there. Vessel names can then be identified from the chart's sidebar and the wreck's story easily found through the index.

It is with the chronicling of over 250 vessel histories that Roger's extensive research provides not only a good reference book but also a fascinating read. He goes beyond simply recording the background on each of British Columbia's multitude of wrecked schooners, steamers, fishboats, and tugs; he also describes the commercial activity in which each vessel was involved. As a result, the reader learns about the development of British Columbia from a maritime perspective. Besides spending hours in university libraries looking through newspaper files, Rogers has also made an effort to interview those players in his stories still living. Hearing a captain's or crewman's comments about their terrifying experiences adds colour to these stories.

If there is a shortcoming in *More Shipwrecks of British Columbia* it would be the enclosed chart. It appears to have been reduced to fit in the back of the book, making the small print difficult to read; the numbering of wrecks off Victoria's waterfront is particularly hard to decipher. Also, because the book targets the recreational diver, a strong statement in the preface stressing how important it is to respect underwater archaeology would seem in order. On the whole, the book is quite an accomplishment and it is certainly deserving of a place next to Capt. Walbran's *British Columbia Coast Names* on any bookshelf.

Rick James
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J.F. Boshier. *Men and Ships in the Canada Trade 1660-1760: A Biographical Dictionary*. "Studies in Archaeology, Architecture and History," Ottawa: Environment Canada, Parks Service, 1992. 251 pp., nominal index, ship index. \$29.95 (US \$38.95 outside Canada), paper; ISBN 0-660-14449-2.

Originally conceived as an appendix to Professor Boshier's 1987 monograph, *The Canada Merchants 1713-1763*, the present dictionary has taken on a life and identity of its own. *The Canada Merchants* was a brilliant interpretive study; *Men and Ships* is no less impressive in its way, giving us a real appreciation of the meticulous archival research that is necessary for merchant studies. Merchants and ships involved in the trade between France and Canada are the subject of this dictionary. Each merchant is the subject of a brief entry, as short as two lines or as long as sixty, that tells what the author has been able to discover of the subject's origins, business and family connections, and mercantile activities. Entries for ships describe characteristics of vessels where possible and identify owners, captains, and voyages. All entries are followed by abbreviated lists of archival and bibliographical sources.

Tens of thousands of pages in a great many archives, and thousands of printed pages in books, have been sifted to identify 520 merchants and 1012 ships that participated in the trade to Canada in the 100 years after 1660. Eight merchant family trees appear, complementing the six in *The Canada Merchants*, a reminder of the interconnectedness of these two works. In a history that is, perhaps, less of individuals than of groups, the members of the group must be identified and, indeed, counted. In the past generation the Canada merchants have at last emerged from obscurity. While this is the work of many historians, no one has contributed more than Boshier. Yet the present work does not mention everyone who ever shipped cargoes between Canada and France or Canada and other parts of the French Empire. Indeed,

using a classification devised by Kathryn A. Young in her doctoral thesis, "Kin, Commerce, and Community: Merchants in the Port of Quebec from 1717 to 1745" (University of Manitoba, 1991), it is clear that Québec factors of French houses almost always appear in Boshier's list; that merchant functionaries (state officials in Canada involved in trade) never do; and that only a few colonial entrepreneurs (Canadian-born traders) are included. To a large extent, this reflects the author's warning (p. 30) that traders who appear in the *Dictionary of Canadian Biography* may not be mentioned. As well, many colonial entrepreneurs concentrated on trade to Labrador, Louisbourg, or the Antilles and were not involved in commerce with France. Their careers remind us of the distinction between the "Canada" and Canadian trades, for the former did not encompass all of the latter.

The peculiar pro-Huguenot/anti-Catholic bias of *The Canada Merchants* that gave this reader pause finds only the faintest echo here in the peculiar assertion (p. 14) that careful notarial records are the mark of unfree states. All in all, however, the succinct and cogent introduction, with its sections on finding and using documents, is both delightful and useful for all researchers, the experienced and the neophytes. No one working in the field of seventeenth and eighteenth-century trade and shipping can afford to be without this essential research tool.

Dale Miquelon
Saskatoon, Saskatchewan

Michael Stammers and John Kearon. *The Jhelum: A Victorian Merchant Ship*. Phoenix Mill, Stroud, Gloucestershire and Wolfeboro Falls, NH: Alan Sutton, in association with Trustees of the National Museum and Galleries on Merseyside, 1992. 150 pp., plans, photographs, tables, appendices. £ 16.99, cloth; ISBN 0-7509-0230-2.

Few of the surviving hulks in the Falklands have been as exhaustively documented as the

Jhelum of Liverpool, England. Between 1987 and 1990, staff of the Merseyside Maritime Museum researched *Jhelum's* career and recorded her remains. They now share their findings in this attractive publication.

The book is divided into two parts. The first fifty pages detail *Jhelum's* career, beginning with her launch in 1849 from the Liverpool yard of Joseph Steel and Son and continuing until her arrival at Stanley in 1870. For much of this time she was in the profitable nitrate trade from the west coast of South America. While on a return leg from Callao for France with guano, she put into Stanley, strained and leaking. In 1871 she was condemned. Once beached, the hulk was initially used as a wharf and warehouse by inter-island traders. Then from the 1920s to the 1960s it was a workshop and petrol store. Today she lies abandoned, derelict and deteriorating.

Although not blessed with a wealth of directly-relevant archival sources on *Jhelum*, the authors deftly weave extracts from Liverpool business and shipping records, *Lloyd's List*, crew agreements and official logs. The result is an historical backdrop against which the reader can view shipbuilding and shipowning in Liverpool in the 1840s, the South American trade in the 1850s and 1860s, and the crews who manned these workhorses of the British merchant fleet.

The second section examines *Jhelum's* design and construction based upon archaeological fieldwork completed by the team in three two-week sessions between 1987 and 1990. Despite a partly dismantled hull listing twenty degrees to port, the team produced "as accurate a set of lines as one could wish for under the circumstances." The body, sheer, half breadth, and construction plan, both elevation and plan view, are reproduced in the appendices. With uncommon thoroughness the authors describe the hull's structure, layout and condition, specifically keel, framing, longitudinal and deck beams, planking and deck fittings, remnants of the rigging and masts, crew accommodation and cargo space.

Unlike the first section, which is well

organized and written, the second suffers from a lack of editing, which proves frustrating for both the casual reader and the avid technician. A case in point is the description of the methodology for achieving accurate measurements of the hull—undoubtedly the most critical element of the team's recording process. The authors describe this in just a few short paragraphs, which unfortunately are unaccompanied by photographs or illustrations, thus forcing readers to rely on their experience and imagination. Another example is the identification of the deck beams by "DA," "DB," and so on, without these references being included in any of the drawings in the body or appendices.

While frustrating, these deficiencies should not deter anyone from consulting this work. It provides a valuable and unique insight into materials and techniques used in one mid-nineteenth-century vessel, and complements extant archival sources to enable marine historians to make comparisons with vessels of other periods. For this we should be grateful to the authors, who persevered in less-than-favourable circumstances to record *Jhelum* before she was lost forever.

Marven Moore
Dartmouth, Nova Scotia

Peter H. Spectre & David Larkin. *Wooden Ship: The Art, History, and Revival of Wooden Boatbuilding*. Boston: Houghton Mifflin, 1991. 272 pp., photographs. Cdn \$60, US \$45, cloth; ISBN 0-395-56692-4. Canadian distributor, Thomas Allen & Son, Markham, Ontario.

Peter H. Spectre & David Larkin. *A Goodly Ship: The Building of the Susan Constant*. Boston: Houghton Mifflin, 1992. 96 pp., photographs. Cdn \$21.95, paper; ISBN 0-395-57322-X. Canadian distributor, Thomas Allen & Son, Markham, Ontario.

Peter Spectre closes *Wooden Ship* by referring to the "art of the craft." That theme is the

substance of this gloriously illustrated volume, which ranges over topics as diverse as Viking longships, sailing warships, varnished speedboats and humble working craft, but which are all united by wood, their common material. Spectre, an experienced marine journalist and contributing editor of *WoodenBoat* magazine, is well-qualified to undertake such a survey of wooden vessels. His evident love for the topic and the vessels, and David Larkin's considerable design skills, are evident throughout.

In his introduction, Spectre speaks of the particular mingling of art and science which wooden craft require and engender. Although he candidly admits that wood may be out of date on strict economic or technical grounds, he argues persuasively that a wooden vessel is like no other, and should persist for that reason alone. In a series of thematically organized chapters, we are given a short discussion of essential information about the type of vessel represented, interspersed with full-colour photographs of actual vessels and models. The book's production standards are very high, and the photographic reproductions invariably flatter their subjects. Excellent use is made of closeup photographs of high-quality ship models which have had extraneous background detail removed for clarity.

The book mingles discussions of historic ships, such as nineteenth-century whaleships, with modern sailing yachts and speedboats. In both cases the authors endeavour to bring out some of the motivating factors for the craftsmen who designed and built them. Though the book contains the customary photographs of yachts of impossibly perfect finish, the authors also bring out the beauty inherent in even the simplest or roughest details of purely functional structures.

One chapter of *Wooden Ship* concerns the building of the ship *Susan Constant*, a reproduction of one of the vessels which carried settlers from England to America to found Jamestown at the beginning of the seventeenth century. This material has been drawn out and

amplified in *A Goodly Ship: The Building of the Susan Constant*, the second volume by Spectre and Larkin. The ship described in the book is a replica of a replica, the second vessel of that name to be constructed for interpretive use at the Jamestown Settlement. Constructed after the first had decayed beyond repair, she incorporates new scholarship and a deeper understanding of early seventeenth-century vessels gained in the years since 1956, when the first one was built. Like *Wooden Ship*, *A Goodly Ship* is heavily illustrated. The ship was constructed in largely traditional fashion, and the colour photographs are therefore a useful record, particularly for a general feeling of the size, scale and complexity of a wooden vessel's structure.

Wooden Ship breaks no new ground in the study of maritime history, but it treads lovingly and lavishly over familiar territory. It belongs on the coffee table of anyone with even a passing interest in maritime history. *A Goodly Ship* is a stunning visual essay about wooden ship construction during the age of exploration. Together they are an attractive and inviting addition to the general literature of maritime studies.

John Summers
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Karl Heinz Marquardt. *Eighteenth Century Rigs & Rigging*. London: Conway Maritime Press, 1992. 330 pp., figures, tables, appendix, bibliography. £35, cloth; ISBN 0-85177-586-1.

Over the last ten years, Conway Maritime Press has published a truly impressive series of books dealing with every detail of the ships of the sailing era, to the point where we now could probably build, rig and sail an authentic eighteenth-century man-of-war, just using Conway publications. This latest addition to eighteenth-century lore has been written by an expert professional model-maker. In the course of his work the author relied much on contemporary sources like J. Roding's *Allge-*

meines Worterbuch der Marine (1793-98), D'Arcy Lever's *Young Sheet Officer's Sheet Anchor* (1811-18) and David Steel's *The Elements and Practice of Rigging and Seamanship* (1794), as well as on Paris, Chapman, and others. He has now synthesized all this in a manageably-sized book, first published in German by VEB Hinstorff Verlag under the title *Bemastung und Takelung von Schiffen des 18. Jahrhunderts* (1986). This revised and expanded English edition would make an admirable companion volume to John Harland's *Seamanship in the Age of Sail*, also published by Conway. The translation is excellent, with no apparent sense of having originally been written in another language. Marquardt also provides French and German names for all items, which is a most valuable feature.

There are surely few reviewers (certainly not this one) who would feel qualified to judge the accuracy of so specialised a book. Every detail is illustrated with Marquardt's clear plans and diagrams. The book begins with a description of the spars and all their fittings, then shows how each spar was rigged. Where variations occurred between naval and merchant practices, or between English, French and Continental ships, these are also shown. By the end of the second chapter, the spars and standing rigging of a full-rigged ship have been revealed.

The next five chapters describe, with sail plans, all the principal types of rig used in ocean-going and coastal ships of the period. Starting with common European merchant types like barques and cats, then two-masted craft (snows, brigantines, bilanders and ketches), the author goes on to single-masted craft and those with spritsails. Even the rig of ship's boats is described. Next are the very interesting Mediterranean rigs: pinks, xebecs and Greek and Turkish craft. Finally there is a selection of Arab, Indian, Chinese and Pacific types, which were much the same then as they were at the beginning of this century. These chapters broaden the scope of the book considerably. The sail plans are clear and

attractive. For me, they answered many questions about Baltic and Mediterranean craft; who can resist the *houaria*, the *sacoleva*, the *gay-bad* or the Portuguese *muletta*, a fishing craft with a hull seemingly descended from the Phoenicians and a suit of alternative sails that would make a modern racing yacht envious?

The next chapters deal with the sails themselves: their cut, the grade and type of canvas required for each, how they were sewn and, in a very long chapter that is meticulously illustrated, every detail of their running rigging, including alternative arrangements. The natural follow-on to this is the layout of the belaying pins. Then there are short sections on blocks, deadeyes, fittings, cordage, splices and ropework, accessories, anchors, and so on (these aspects are well covered in D'Arcy Lever and elsewhere).

In his chapters on spars and sails, Marquardt includes tables giving the dimensions and relative proportions for various sizes of ships—for the most part, naval ships, because the rates were standardized and the information is readily available. Tables are also reproduced in the appendix from Steel's *Elements* and from an earlier (1711) work, *The Seaman's Speculum or Compleat Schoolmaster* by J. Davis, who optimistically predicted that his rules "will rig the Navy forever." Here we can find not only the size and amount of every rope required but also how much seizing, old canvas, tar, tallow and other stuff is needed.

Although he is a model-maker, Marquardt has written a book about the original full-sized ships, not about models. Of course, it will be of great use to hobbyists, especially those who desire extreme accuracy. For the rest of us, it is the excellent illustrations, the descriptions of lesser-known types of ship and the addition to our overall knowledge of eighteenth-century shipping that will appeal.

Douglas Maginley
Mahone Bay, Nova Scotia

Frank Scott. *A Square Rig Handbook*. London: The Nautical Institute, [202 Lambeth Road, London SE1 7LQJ. 120 pp., photographs, figures, bibliography. £30 (+ postage to North America), library binding; ISBN 1-870077-11-3.

This volume has the same format as an earlier publication of the Nautical Institute, *Square Rig Seamanship* (1989) by R. M. Willoughby, and is intended to supplement rather than replace it. It is aimed primarily at senior cadets in square-rigged training ships, and will be required reading for those aspiring to serve as boatswain or officer in this type of vessel. In parallel with his naval career, the author, Lieutenant Commander Frank Scott RN, has served as Master and Mate in British, Norwegian and German training ships, experience which eminently qualified him to compile this book. He is, by the way, the son of Morin Scott, himself an experienced square-rigger master and familiar to many of our members as the author of the hugely entertaining naval memoir, *War is a Funny Business* (1989).

This work is clearly destined to become a standard textbook in its field, so one hopes that in subsequent editions, the occasional paragraph, particularly in the chapter on Design and Construction, can be reworked so that the meaning is crystal clear to the non-expert at first glance.

The problems of dealing with numbers of young people, particularly safety measures, are thoroughly discussed, besides consideration of sailmaking, rigging, shiphandling under sail, and organization of the cadets' routine and training. There are excellent sections on emergencies such as "Man Overboard," and a chapter on emergency helicopter transfers, a field in which Scott can claim special professional expertise. This is the only place I know of where you will find discussion of the idiosyncrasies of a sailing ship being handled under power. The dynamic stability of training ships is especially important, highlighted by the tragic loss of the *Marques* in 1984. This is an area where too

narrow reliance should not be placed on theoretical calculations and, as the author says, "Court transcripts show that too many people still view stability in terms of metacentric height, which is depressing when you consider that it is over a century since the loss of HMS *Captain* exposed the fallacy of that position."

I have one comment on a technical matter: a sailing vessel heeling to the wind tends to want to run up into the wind, or becomes "ardent," and to compensate has to carry weather helm. To some extent this disposition can be obviated by designing the Centre of Effort (CE) of the sail plan with some "lead" over the Centre of Lateral Resistance (CLR). However, the claim (p. 18) that big ships need less CE-CLR lead than small ones, that fore-and-aft vessels need more lead than square-riggers, and particularly the assertion that the largest square-riggers were designed with little or no CE-CLR lead, is not borne out in absolute or percentage terms by the examples in F.L. Middendorf's *Bemastung und Takelung der Schiffe* (Berlin, 1903) or by figures in W.H. White's *Naval Architecture* (London, 1894). Middendorf was a director of Germanischer Lloyd at a time when there were still many commercial sailing ships afloat, but when many aspects of the shipping business were being studied scientifically in Germany. He provides a substantial list of sail plans of commercial sailing vessels from a five-mast ship down to schooners, and it appears that big sailing vessels were in fact given more lead than small ones in absolute terms, although the ratio of Lead to Length remains remarkably constant, within a range of five to eight per cent or so. Actually hull form seems to be more significant than rig in this context, but since no modern sail-training ships are built with the tub-like hull of a Dutch *tjalk*, this gets overlooked nowadays. In Middendorf's "sharp built" schooners, the CE lags the CLR. White gives very similar figures. No doubt the theory behind this is much better understood today than was the case ninety years ago, and there may well be modern data

which support an opposite conclusion, but Middendorf and White cannot be dismissed lightly.

One other minor point should be made. Confusion between *tack bumkins* and *passaree booms* goes back at least to 1914, when Carr Laughton suggested in *Mariner's Mirror* (Vol. 4, pp. 193ff) that the *lof*, an item which turns up in fourteenth-century inventories, was "a sort of movable tack-boomkin or passaree boom." Perhaps it would be best if the former term were reserved for a spar extended forwards, to which the fore tack is got down, when closehauled, and the latter for a spar extended laterally, like a lower stunsail boom, and used to pull the clew of a course down and outwards, when running before the wind. With regard to Scott's form *Paracee*, can any member of CNRS offer similar citations? I vaguely recall running across *Parsee* or something similar in Lubbock or Masefield but *Passaree* or *Passarado* would be more traditional spellings.

This text will be of utmost use, not only on board North American sail training ships, but to anyone interested in square-rigged sailing ships, particularly the way they have been changed by modern technology. The book is highly recommended.

John H. Harland
Kelowna, British Columbia

Roy L. Harrington (ed.). *Marine Engineering*. Jersey City, NJ: The Society of Naval Architects and Marine Engineers, 1992. xi + 953 pp., figures, tables, index. US \$190 (\$95 to members), cloth; ISBN 0-939773-10-4.

Marine Engineering first appeared in two volumes in 1942 and 1944; the second edition in 1971 produced a completely rewritten text. This latest edition is not much different in format and content from the second edition, though it reflects the changes of the past twenty years in the field of marine engineering. It still maintains its encyclopedic format and the topics are similar. However, while

some chapters are only slightly modified, others have been rewritten by new authors.

The book addresses in detail different aspects of marine engineering in twenty-two chapters, covering basic engineering knowledge as well as practical applications. The topics include diesel engines, gas turbines, boilers, steam turbines, nuclear marine propulsion, electric propulsion drives, propellers, shafting systems, bearings, lubrication, fuels, fuel treatment, noise control, pumps, compressors, blowers, ejectors, condensers, heat exchangers, desalination plants, hull machinery, electrical systems, piping systems, heating, ventilation, air conditioning, refrigeration, and materials used in marine applications.

Within these topics, several changes are worth noting. A new format was adopted for the introductory chapter. It includes a discussion of the ship design process with its four different stages and their relationship to each other. The chapter on propellers, shafting and shafting system vibration analysis has been slightly modified. New sections are added on shaft alignment to a slow speed diesel, shafting eccentricity, the use of strain gauges in shaft alignment, and a description of thrust bearings. An example of calculation of the first mode of torsional vibration of a diesel-driven propulsion system is also given.

The chapter on electrical systems has been rewritten. The section on power sources and conversion was updated and revised. A discussion of solid state converters and the use of uninterruptible power supplies is included. Four new sections are added, on degaussing, the electro-magnetic environmental effect, electric plant control and exterior communication. The equation used to calculate the required number of fixtures (p. 754) does not seem to take into consideration the light loss factor. This factor is important to account for the depreciation of the output lumens over the life span of a lamp.

The chapter on automation in the old edition was dropped. Each automatic control system is discussed in the chapter dealing with the relevant main system. A new chapter

on noise control is added which provides a thorough treatment of the subject. Some chapters give numbers to the equations while others lack this feature. Another source of confusion is the use of mixed types of units: the English and the SI systems.

This is a valuable reference for marine engineers and naval architects and for other engineers working in the marine engineering field. It is also a useful text for undergraduates in the marine engineering and naval architecture fields. However, student access to this reference may be limited by its price. Producing the book in two or three separate volumes may prove beneficial for those who are only interested in a specific topic and may increase the accessibility of the book.

M. R. Haddara
St. John's, Newfoundland

Adrian Jarvis. *Liverpool Central Docks 1799-1905: An Illustrated History*. Far Thrupp, Stroud, Glouc. and Wolfeboro Falls, NH: Alan Sutton Publishing and National Museums and Galleries on Merseyside, 1991. xi + 259 pp., maps, figures, photographs, appendices, notes, bibliography, index. £14.99, cloth; ISBN 0-86299-783-6.

The central concern of Adrian Jarvis' book is to explain why, after 1848, the management neglected the central docks of Liverpool's magnificent system? Towards this end, Jarvis has utilised hitherto unused archival material from the records of the Dock Committee and its successor, the Mersey Docks and Harbour Board. His whole approach throughout the book is based firmly on the proposition that docks are essentially about the movement of goods. From this follows directly his concentration on the problems arising from the need to provide dock space, loading and unloading facilities, sheds, cranes, railway tracks and all the other requirements for the smooth passage of goods in and out of the port. More particularly, the management system responsible for both strategic planning and day to day run-

ning of the docks is put under the microscope.

The book opens with a chapter on the early development of the port and is followed by a long chapter examining both the management system and its efficiency under the Dock Committee and its successor, the Mersey Docks and Harbour Board. A paradox which Jarvis immediately reveals is that though the committees were in the hands of successful shipowners and merchants, their business acumen was not obviously apparent in the management of the docks. Incompetence and corruption were common place. The relationship between decision makers, engineers and men on the dockside is skilfully etched, illuminated with wonderful examples of the gap between administrative records and corruption in practice, such as the great stone scam. A byzantine administration operated by the Mersey Docks and Harbour Board succeeded in obscuring the reality of lax financial control from Board members. Many of the latter had no idea what they were supposed to be doing.

Between 1799 and 1848, the north docks were built. They consisted of the Collingwood, Salisbury, Stanley docks at the northern end and Princes half tide dock at the southern end of the system. The extension of the docks north of this group led to their description as the central docks. In 1848, a year in which five new docks were opened, the management appeared to have been up to their job. Yet by 1858, the central system was proving inadequate in meeting the needs of the larger type of vessel for which they were constructed. Construction of larger docks continued in the second half of the century, leaving the central system neglected, providing for the needs of the coastal trade and smaller ocean going vessels. In describing this neglect, Jarvis gives a detailed picture of the issues facing decision makers; the problems of dock gates, sheds, handling equipment, rail links and reconciliation of the competing interests of various trades. Chapter four is an analysis of the attitude of the dock managers towards the needs of the coal and grain traders, which the

Dock Board seem to have regarded as of little importance. Perceptively, Jarvis points to some confusion in the minds of the Board members as to whether they were providing a service for the coal trade or for shipowners.

Lack of foresight and incompetence were not confined to the administration of the central docks. In 1879, the new Langton Graving docks were opened yet by 1888 they were too small for the vessels they were built for. The problems arose not simply from poor management structures; these were compounded by engineering errors on the part of the dock surveyors. Jarvis claims that during the term of office of G. F. Lyster (1861-97), no scheme was free from error. In explaining the neglect of the central docks, Jarvis argues that modernisation of the South and North docks left little time or money available for the updating of the central system. This leaves the issue of why the central docks should have been pushed down the list of priorities. Jarvis suggests that snobbery was a major factor. The large passenger and ocean going cargo liners were "fast, expensive and looked very pretty." (p. 122) The companies owning these vessels were powerful and influential and they used their influence on the Dock Board. By contrast, the coasting trade consisted of smaller companies with less political clout.

Jarvis has a lively style of writing which makes for a very readable book. More important, he writes with authority, casting his net over technical matters of dock construction, dock operations, labour conditions, the needs of particular trades and business administration. An unusual feature of the book is chapter eight; bringing together all his considerable knowledge of dock operations, Jarvis has created a fictitious dock, *The William*, and describes a single working day. This was a risky undertaking but it works brilliantly. The description of the problems of unloading a wagon load of ceramic toilets has a ring of authenticity.

This book is primarily about dock administration though there are many references to

the archaeology of the dock system. Jarvis succeeds in convincing the reader that the essential concern of docks is the movement of goods. Though the particular problems addressed were those of the Liverpool docks, this could profitably be read by present-day students of corporate strategy, particularly in the sphere of transport economics. It is an important contribution to our understanding of how ports develop and operate.

Frank Neal
Salford, England

L. A. Ritchie (ed.). *The Shipbuilding Industry: A Guide to Historical Records*. Manchester: Manchester University Press, 1992. viii + 206 pp., appendices, indices. US \$59.95, cloth; ISBN 0-7190-3805-7. Canadian and American distributor, St. Martin's Press, New York.

The shipbuilding industry was one of Britain's great staple industries in the nineteenth and twentieth centuries and, down to 1914, a crucial element in the expansion of world shipping. More recent years have seen hard times and decline so that by 1990 Britain had ceased to possess any effective merchant shipbuilding industry. Decline has also occurred in the naval building sector and even as this review is written the demise of Swan Hunter is likely to see the end of shipbuilding on Tyneside. In a sense, this book is an epitaph to a great industry. The collapse of shipbuilding from the late 1950s led to vast company archives being liquidated along with the yards themselves and while dereliction has been the latter's fate, business records have at least been preserved on a large scale. The growth of interest in business history, occurring at the same time, has produced the ironic contrast of records being salvaged while capacity was scrapped.

This volume, the second to appear in a new series *Studies in British Business Archives* sponsored by the Business Archives Council, lists information on the availability and location of shipbuilding archives. The

bulk of the volume is given over to Shipbuilders: Lists of Records. The arrangement of the listing is admirably logical. For each company the List, in sequence, provides, a brief history, details of the nature of its business, the location of records, the form and type of records and finally, where appropriate, a list of secondary works on the company. This exemplary compilation is the work of L. A. Ritchie who rightly features as editor. However, users of this guide may well feel that Ritchie's labours deserve more recognition than usually conferred by the terms editor and compiler. In perusing the listing a number of features may surprise. One is the dispersed location of records of individual companies. Thus, the researcher seeking to consult material for say the records of the Ailsa Shipbuilding Co. would have to visit five different places of deposit — and this is not an isolated example. But perhaps what is most remarkable, is the sheer volume of documentation accumulated by shipbuilders in the course of their business. The explanation is provided in a valuable essay by Michael Moss on "The records of the shipbuilding industry." He demonstrates that the business of tenders, contracts, designs, drawings and progress reports during construction, and the retention of such paperwork in the hope of repair and maintenance, all generated and ensured a huge written record. That such a body of material should come to be preserved is explained in the other element of this volume, the introductory essay "Modern British shipbuilding, 1800-1900" by Anthony Slaven which succinctly traces the rise and sad fall of the industry and its decimation in the thirty years since 1958. Slaven's excellent essay provides a backcloth to the massive body of records which, like the yards and workers they portray, have thus recently become redundant. The triumph and tragedy of this study is that it represents the richest of sources for historians, particularly those engaged in the economic, maritime and business fields, while at the same time portraying an era of British history as dead, if not as distant, as the relics

of the medieval past; in short, it symbolises a record of past achievement and the lack of a future. Even so, this book deserves a review with a more positive conclusion. Here we have a volume which will prove the seminal guide to the archive records of British shipbuilding and Ritchie, Slaven and Moss have provided researchers with the most excellent of introductions.

David M. Williams
Leicester, England

Alan K. Smith. *Creating a World Economy: Merchant Capitalism, Colonialism, and World Trade, 1400-1825*. Boulder, CO: Westview Press, 1991. viii + 318 pp., notes, bibliography, index. US \$60, cloth; \$18.95, paper; ISBN 0-8133-1110-1, cloth; 0-8133-1109-8, paper.

In the preface to the first of a projected two-volume work, Alan K. Smith notes the "awe" that many participants at a late 1970s seminar felt at the "audacity" of Immanuel Wallerstein for attempting to write a study of the origins of the modern world. Such an attitude is both understandable and lamentable. Given the increasingly narrow focus that we train our graduate students to adopt, it is easy to comprehend such skepticism. Yet it is unfortunate that a growing number of historians appear to have doubts about the validity of studies that ask "big" questions and encompass lengthy temporal eras. Within this context it is thus admirable that Smith was deterred in his quest to understand the evolution of the world economy. At the same time, it is unfortunate that he has not been more successful. For while he has written a fascinating and often stimulating book, it is generally unconvincing.

Professor Smith sets out to try to understand why some regions of the world became wealthy under the aegis of merchant capitalism while others fared less well. In the course of answering this question he often provides fascinating insights, many of which will doubtless form the basis for new empirical

studies. Yet in the end the project is undermined by a penchant for conceptual imprecision. He argues, for example, that in the four centuries before 1825 there evolved a set of economic linkages between Europe and the "wider world" and that the nature of these relationships were vital for comprehending why Europe in general did so much better than elsewhere. While this conclusion will not startle anyone who has read Immanuel Wallerstein or the growing number of non-European scholars who have designated themselves as "expansion historians," it will be greeted less warmly by economic historians and those who prefer definitional precision. The basic problem is with the phrase "world economy." Since he never provides a clear definition, it is difficult to accept the framework within which he poses his questions. In short, if a "world economy" came into existence before 1825, we ought to be able to identify it empirically. The author, however, simply asserts that what we can observe constituted the concept he seeks to explain.

It is of course difficult to prove Professor Smith wrong. Indeed, that is precisely the danger of employing such an imprecise concept. Had he opted instead for the more widely-used term "international economy" (the flow of factors of production across national frontiers) we could have tested many of his generalizations empirically. But since he did not, we are left in a quandary. While he can point to increasing linkages between Europe and the rest of the world, he has great difficulty in demonstrating any kind of true economic integration. Even within the spatially widespread British Empire—the unit within which the various economies were most closely linked—it is hard to find much integration prior to the late seventeenth century. Instead, what is obvious is increasing economic *interaction*. While this is important, it is a very different matter. Various regions of the world could (and did) trade with each other without creating a very high degree of interdependence. To be fair to the author, discerning whether there were interactions was one

of his goals. But it is very different than what most readers are likely to be led to expect from the title.

The greatest strength of the book are the wide-ranging sources employed by the author. Indeed, the impressive bibliography, which runs for more than twenty pages of exceedingly small type, is an excellent introduction to the secondary literature for any student interested in economic development before 1825. But because he has chosen to follow Wallerstein into the definitional wilderness, it is difficult to accept Alan Smith's central conclusions.

Lewis R. Fischer
St. John's, Newfoundland

Daniel Todd. *Industrial Dislocation: The Case of Global Shipbuilding*. New York: Routledge, Chapman and Hall, 1991. xv + 292 pp., tables, maps, references, glossary, index. US \$74.50, Cdn \$93.50, cloth; ISBN 0-415-04213-5.

In this impressive analysis of world shipbuilding in the late twentieth century, Daniel Todd argues that the industry serves as a "touchstone for global industrial trends, setting off the problems of industrial heartlands against those arising in the parts of the earth which have only just taken up the banner of industrialisation." (p. xi) He explores the shifting geographical loci of this cyclical industry from the Advanced Industrial Countries (AICs) to the Newly Industrialising Countries (NICs) arguing that Japan, the pre-eminent maritime power, effectively straddles both camps, connecting and affecting the fortunes of both old and new producers.

Todd examines the forces leading to dislocation from both sides of the equation; on the one hand the collapsing competitiveness of the AICs, particularly Britain, which had so dominated the world shipbuilding industry in the period immediately after World War II and, on the other, the rise to ascendancy of Japan followed by NICs such

as Korea and Taiwan.

Locating the shipbuilding of the AICs in a context of long-term industrial life cycles and the international division of labour, Todd argues that one can not explain the crisis prevalent in Britain *et al* simply by reference to the oil crisis of the early 1970s. Admittedly it precipitated fierce price competition in circumstances of huge over-capacity, in which the British yards proved extremely vulnerable, but at a more fundamental level lay the inherited problems of an industry approaching "senescence. "

As in other sectors the Japanese shipbuilding miracle, apparent by the late 1950s, was based in large part on the role of the state. Not only was capital investment underwritten but inter-firm rivalries were subordinated to the strategic goal of international dominance as mass production developed particularly in the booming tanker market. The role of government too proved important as the new shipbuilding nations, like Korea, entered the industry with the wider objective of generalising technological developments.

Todd clearly demonstrates the long-standing consequences of over-capacity which saw much of the western European industry reduced to fragments from the late 1970s onwards and which also led to rationalisation in both Japan and even the healthier NICs. In doing so the great strength of his study becomes clear. In the highly competitive and truly global world shipbuilding market the limitations of government policies at the level of the nation state are revealed. Furthermore Todd cautions against over-optimistic expectations that the deep problems of the industry can be overcome.

This is a serious and deeply learned study which should be read by both shipbuilding experts and a far wider audience since it deals as much with the central questions of industrial success and decline as with the specifics of one industry.

Philip Taylor
Glasgow, Scotland

Michael Strachan. *The Ben Line 1825-1982: An Anecdotal History*. Wilby, Norwich: Michael Russell, 1992. viii + 248 pp., table, photographs, appendix, maps, index. £17.95, cloth; ISBN 0-85955-197-3.

As an earlier resident of Merseyside in England, when contemplating cargo-liner traffic to the Far East, it was inevitably of Alfred Holt and the Blue Funnel line that one first thought. With its headquarters in Liverpool and its fairly majestic vessels seen frequently in the local Docks, this company was a prestigious element of pre-war British shipping. Even then, however, there had, for more than a century, been a fiercely independent and somewhat feisty Scottish competitor: Wm Thomson and Company. It is this family firm and the post-war history of their Ben Line that is the subject of this book.

This is a most entertaining and informative account of a "compact, hard-working, family business" (p. 120) whose earlier history had been adequately covered in previous works and is dealt with briefly in the first chapter of this book. The main thrust, however, is on the developments since 1946 when the author, M.F. Strachan (a war-time Lieutenant Colonel) joined the Company as a shipping clerk at £400 per year. Although not himself a member of the Thomson family, Strachan would rise to become Chairman from 1970 to 1982. During this period the line was built up from seven, somewhat decrepit, ships immediately following the war to a maximum of thirty-six vessels in the late 1960s, including the first cargo-liner to operate at twenty knots. Their main area of operation was from Britain and Europe to South East Asia and the Far East. In this they were, of course, in direct and continuing competition with Holt's and the P&O lines. Nevertheless they created useful niches for themselves with vessels capable of handling large, awkward and heavy lifts, as well as developing a significant capability for military cargoes during the various conflicts in that part of the world.

All aspects of their work, ashore and afloat, are covered with a cheerful frankness and from the obvious basis of first hand experience. There is no intent to try and disguise those occasions when things went wrong, but one does gain a clear impression of the successful efforts by what might be regarded as an underdog determined to "implement decisions with the minimum of bureaucratic formality and more quickly than our competitors" (p. 81) and, thus, to achieve effective progress.

Somewhat sadly, for those of us who have a preference for cargo-liners as they used to appear, the 1970s brought the end of an era. The concept of container handling of cargo—initiated in the United States and Australia—would lead to the introduction, in that decade, of very large container ships with massive shore facilities. This revolution, for it was clearly no less, is perceptively recounted, providing an admirable review of the complex national and international negotiations that were involved. With this achieved the Company—faced with fewer but larger vessels having smaller crews—sought to diversify. Here, they attempted to find activities that would be profitable, related to their existing manpower and experience, not subject to cyclical fluctuations and generally of a high-technology character.

Thus, by 1982, they had a very few cargo liners but a range of container ships, drilling rigs of various types, bulk and chemical carriers as well as oil tankers. It is pertinent to note that while the *total* headquarters staff in 1946 was twenty-two, some eighty *senior* staff are listed for 1982 in order to take care of these diverse activities. In spite of these successive upheavals it is significant that there has been an on-going element of continuity. Thus, in 1982, three Thomsons were among the nine Directors—one of them being identified as William IV. Similarly the vessel names were reiterated, rising up to *Benledi VIII* - a bulk carrier.

This "anecdotal history" is a good read, somewhat unusual for this kind of book and

a worthy successor to R. H. Thornton's *British Shipping* (1939) which, indeed, Strachan cites as a valuable reference. Particularly, however, we gain a picture of the author as a cheerful, enthusiastic individual with a concern—not only for a successful business venture-but also for the well-being of all who contributed to it. The history is highly recommended for all those who have affectionate memories of world shipping.

S. Mathwin Davis
Kingston, Ontario

George A.B. King. *A Love of Ships*. Emsworth, Hampshire: Kenneth Mason, 1991. 294 pp., photographs, illustrations, index. £14.95, cloth; ISBN 0-85937-358-4.

Mariners and others who have ever heard the call of the sea will relish this autobiographical memoir. The author writes eloquently of his boyhood by the Firth of Clyde, where the lure of ships proved irresistible, his apprenticeship in 1941 at age fifteen in Alfred Holt and Company's prestigious Blue Funnel Line, and his subsequent rise in the giant British Tanker Company to master and, eventually, managing director of the reorganized BP Tanker Company.

Canadians who served apprenticeships at sea will empathize with the young midshipman learning his craft by osmosis in the long-established British tradition, sometimes feeling a little homesick and questioning the system but nevertheless revelling in shipboard activity and the fascination of distant ports of call. There were, then, more than the usual adventures, for the hazards of war were ever present. King was a member of his ship's gun crew in a gallant shoot-out with a determined U-boat whose torpedoes ultimately found their mark. Abandoning their sinking cargo vessel 750 miles off the West African coast, the crew were in open boats until rescued by a neutral steamer.

After earning his second mate's certificate, King gained varied experience as a

watchkeeping officer, leading to an appointment with the British Tanker Company and opening up an auspicious career. In his new employ, he became a chief officer at the age of twenty-five. By 1952 he held a master's certificate. He was then seconded for a year to the famous cadet training ship *Conway* as an instructor in navigation and was aboard when the venerable wooden vessel, while being taken in tow for drydocking, went aground in the Menai Strait and broke her back.

On his return to sea, King wrote a series of articles that were collected into a practical handbook under the title *Tanker Practice*. Marked for advancement, he was promoted to master to gain experience in command before becoming marine superintendent of BP Tanker Company, with a fleet of 120 tankers. His subsequent promotions to operations manager and, in 1975, to managing director cover a period of intense activity in the evolution of tanker transport. The latter part of his memoir, reflecting a particular concern with tanker safety, includes a perspective of the *Torrey Canyon* disaster, which he observed at first-hand.

Until October, 1973, the demand for oil and for ever-bigger "supertankers" seemed boundless. Then, suddenly, the actions of OPEC drastically altered the pattern of the oil industry. Japanese shipyards, meanwhile, were in the ascendancy while deteriorating industrial relations in the United Kingdom signalled the end of British predominance in shipping. King, honoured with a CBE, decided to retire in 1981, forty years after going aboard his first ship as a raw midshipman.

Of his many talents, King's literary ability is by no means least. A number of attractive illustrations attest to his artistic competence. Whether as an account of how deck officers were traditionally bred for the British merchant service in its years of glory, of the spectacular growth of tanker shipping after World War II and the problems associated with it, or simply of a sailor's love of ships, King's memoir is a nautical delight. One point should, perhaps, be made in clos-

ing. I have not seen his book in retail stores that I visit; interested persons might have to order from the publisher.

George Schuthe
Ottawa, Ontario

Jon Th. Thor; trans. Hilmar Foss. *British Trawlers in Icelandic Waters: History of British Steam Trawling off Iceland, 1889-1916 and the Anglo-Icelandic Fisheries Dispute, 1896-1897*. Reykjavik, Iceland: Fjølvi Publishers, 1992. 264 pp., maps, photographs, tables, notes, bibliography, index. £29, cloth; ISBN 9979-58-206-5.

The decline of fish stocks in the north Atlantic and the belated recognition that overfishing by highly mechanized and efficient trawlers is the major cause for this disastrous state of affairs makes Thor's study timely. So too is his reminder that the international law of the sea has been evolving rapidly during this century, pushed by Icelandic actions.

The entry of the steam trawler into the ground fish industry, that had always been dominated by baited hooks and time-consuming manual labour, was a revolutionary and unexpected development. In fact, in the 1890s, when Thor's study commences, Newfoundland was convinced that it held the key to the successful operation of the American, Canadian and French deep-sea fisheries off its shores—the control over enormous supplies of bait. To the small colony's surprise and chagrin steam trawlers put an end to the crucial role of bait in this industry.

Thor describes in detail the introduction of British steam trawlers into the British-Icelandic fisheries in the 1890s. He examines the technology and explains how the trawlermen considered it their right to fish inside Iceland's fiords. The Icelanders looked on in amazement as British steamers dragged their large beam trawls through the waters before their very doors and soon began to dispute Britain's right to operate so. Disputes escalated, reaching a crisis in 1896-97 as Iceland

tried to establish control over these waters in spite of British force. This was successfully accomplished with a 1901 agreement: foreign fishing ships were to remain three miles from Iceland's coast and out of any fjords less than ten miles wide at the mouth. Yet the British catch continued to increase and by 1914 amounted to 130,000 tons of ground fish including 85,000 tons of cod (thereby laying the foundation for an industry that was to expand out of control in later decades).

The description of the expansion of the British steam trawl fishery from its origins in one or two Icelandic locations to its eventual encirclement of the island is excellent. Thor includes useful tables, informative photographs and detailed maps to illustrate his argument. Moreover, while it is difficult to have much sympathy for the British fleet Thor is objective in his discussion of the developments and conflicts. His research was exhaustive and his documentation will be valuable to other researchers. However, in his use of the Foreign Office records (FO 22) in the Public Record Office, he should have included more detailed references than just volume numbers.

The major problem with this book is that the translation is poor and it would have benefitted from more careful proofreading. For example, the period 1891-1976 is described as "eight score years." (p. 9) Proofreading would also have caught the awkward, unusual and sometimes incorrect use of tenses which break the flow of the narrative and make it difficult for the reader to follow the argument. Consequently, this English translation will unfortunately be a useful reference rather than a popular work. Nonetheless, it will be recognized for its contribution to the study of the effects of modern technology on the fisheries and for its discussion of the development of international law as it pertains to fisheries and coastal and territorial waters.

Shannon Ryan
St. John's, Newfoundland

Priscilla Doel. *Port O'Call: Memories of the Portuguese White Fleet in St. John's, Newfoundland*. St. John's: Institute of Social and Economic Research, Memorial University of Newfoundland, 1992. xiv + 204 pp., photographs, maps, appendices, glossary, bibliography. \$18.50, paper; ISBN 0-919666-80-9.

The *White Fleet*, Portugal's annual fishing expedition to the Grand Banks, and its subsequent calls in St. John's had a great impact on both sides of the Atlantic. An analysis of the economic, social, and cultural effects of such an interaction would be well worthwhile. Even a simple collection of interviews recording the experiences of those involved with the fleet would be fascinating and would serve as an excellent primary source for future study. Unfortunately, it is not clear *whose* memories *Port O' Call* sets out to record.

The book consists of an introduction and nine interviews. The former, however, is too long, disjointed, and self-indulgent; it is sentimental, mythical, romantic, and historically inaccurate. The book aims to appeal to academics and to the "curious public," a noble venture at which Doel fails miserably. The overall tone is that of *saudade* - a Portuguese word that elusively conveys a sense of longing and regret. The impression is that we are supposed to appreciate Doel's own *saudade*. This is most apparent when she tells us that, upon her first visit to St. John's in 1988, she was shocked to find no evidence of the harbour's greatness, when John Cabot, *et al.*, graced these parts of the world. Doel was equally amazed at the absence of the *White Fleet*; this propelled her to write her book.

The idea behind the project is not the problem; rather, it is inadequate research, poor organization, and lack of direction. Doel jumps from era to era with little regard for cohesion or relevance. She also makes some statements that are downright embarrassing. Her assertion that St. John's women liked Portuguese sailors (p. 28) is a theme to which this review cannot possibly do justice. And the reference to 1955 being the quincentennial

of Portugal's presence in Newfoundland waters (p. 32) is indeed exciting news. If Doel has proof that the Portuguese were fishing anywhere near this region in 1455, this reviewer would be glad to hear of it!

In the second part of the book ("Voices") we get to the essence of *Port O' Call*. Here one gets a glimpse at life on one of those fishing trawlers, the working conditions, the cultural exchanges, and the controversy about over-fishing. There are nine interviews, a rather disappointing number, especially given the choices of interviewees. Only one fisher is featured, and his account of fifty-three years of fishing experience is the highlight of the book. The remaining voices belong to three Portuguese captains, one Canadian judge and a Canadian steamship owner, a Portuguese navy commander, a nurse, and a captain's wife. Given that there were a lot more fishers than captains in the *White Fleet*, the lone voice representing the former is regrettable. It is also unfortunate that the collection includes the words of only one woman, a captain's wife and school teacher, who was considered only at the last moment. While the men were gone for up to six months fishing, the women were left behind raising children and making ends meet—and not always crying, as Doel suggests. More "Voices" from those with a *real* link to the *White Fleet*, coupled with a lot less of the author's presence, would go a long way to justify publication of this book.

Darlene Abreu Ferreira
St. John's, Newfoundland

Robert Parsons. *Lost At Sea, Vol. I*. St. John's: Creative Publishers, 1991. xiv + 121 pp., photographs, sources, bibliography. \$11.95, paper; ISBN 0-920021-96-4.

Robert Parsons. *Lost At Sea, Vol. II*. St. John's: Creative Publishers, 1991. ix + 181 pp., photographs, sources, bibliography. \$11.95, paper; ISBN 1-895387-09-4.

Tragedy at sea was a pervasive part of life in

Newfoundland's recent past. Thousands of vessels were shipwrecked on her rugged coastline, including hundreds of Newfoundland tern and banking schooners and coastal vessels involved in the fishery—one of the most precarious occupations in the world. Ballads, stories and supernatural beliefs relating to where ships went down attest to the frequency of such tragedies. They helped Newfoundland families accept the potential costs—in terms of loss of human life—of pursuing a living from the sea.

Robert Parsons' two volumes of *Lost at Sea* give specific and detailed information about a phenomenon that was of central importance to earlier Newfoundlanders. The books focus on schooners, mainly of the Grand Bank area, which were often lost with their entire crews. Some seemed simply to disappear so that their fate almost certainly will never be known. Others met disaster from storms, fires, collisions with other vessels, partially submerged derelicts, ice, shoals or hidden rocks (locally called sunkeners), or were intentionally destroyed in wartime by enemy ships and submarines. Considering the small population of the Grand Bank area, the number of vessels and crews which ended their days in tragedy is staggering.

Each chapter of these books carries several anecdotal accounts of disasters and disappearances beginning with "Early Wrecks (1868-1890)" in the first volume and ending with "The End of an Era (1950-1974)" in the second. Where possible, the accounts are enhanced with photographs of the vessels and, sometimes, their crew members. In a few instances the vessels are shown while they are in peril or after they had met their tragic end. These books do more than simply chronicle shipwrecks. They document the stoic nature of the lives of earlier seafaring Newfoundlanders who had to endure so much adversity.

Parsons was born in Grand Bank, and grew up there when schooners were disappearing from South Coast ports. Various members of his family such as his father,

Charles, who spent a lifetime sailing on banking schooners, and his uncle, William Baker, who was a fisherman and sailor, often captured his interest with stories concerning the sea. After teaching in various parts of Newfoundland, he returned to teach in Grand Bank, where he now resides. His relatively recently rediscovered interest in the history of the bank fishery challenged him to undertake the necessary work of gleaning sufficient information from newspaper and magazine articles, diaries, scrapbooks, personal interviews and even gravestones, to produce his books.

These two volumes are important. Parson's passionate interest in his subject has resulted not only in a contribution to the documentation of sea tragedies but also, and perhaps more importantly, to an increased awareness of the central role of shipwrecks in the lives of earlier Newfoundlanders.

Walter W. Peddle
Spaniard's Bay, Newfoundland

John W. Froude. *On the High Seas: The Diary of Capt. John W. Froude, Twillingate—1863-1939*. St. John's: Jespersion, 1983. viii + 260 pp., photographs, illustrations, glossary. \$9.95, paper; ISBN 0-920502-17-2.

Recorded in an old accounts ledger, John Froude's diary recounts his long life at sea and came to light after his death. It was eventually published in 1983 through the assistance of Dr. George Story of Memorial University of Newfoundland. This unusual volume is written in the forthright manner of a sail-trained mariner. Few today can imagine the hardships endured by the small crews of those little Newfoundland schooners in which Froude spent his early years.

Froude went to sea in 1877 at age fourteen, joining a schooner at French Bay and sailing out of Twillingate in various fishing and sealing schooners for the next ten years. Those were not very rewarding years financially and so, in 1887, he signed on as AB in

the Scottish schooner *Konigsberg* of Banff, 99 tons register and bound for Livorno with a cargo of salt cod. Thus began his life as a deep sea mariner. He remained in *Konigsberg* for a further voyage from Bristol to the Brazils. Whilst ashore in South America he got in the usual, and often dangerous situations for which these ports were noted. He said goodbye to *Konigsberg* exactly one year from departing Twillingate.

We next find Froude in steam; as a capable and much experienced sail-trained seaman he served on many ships, voyaging all over the world. His time in the deep sea foreign trade steamers lasted until 1891, with the exception of brief spells ashore, on one of which he gained some experience as a photographer in London. He then served in a succession of American registered sailing vessels. By 1892 his voyages were so brief that his account becomes increasingly confusing to the reader, both chronologically and otherwise. He found time to marry in 1893 and would return home from his short voyaging to various endeavours including boat building.

In 1898 he was mate in a Scottish vessel and in 1899 he was in the *Little Gem*, a schooner famous in the fish trade for her remarkable run in 1895 from St. John's to Oporto in fifteen days. Unfortunately Froude gives no details of his time in her, and indeed it is increasingly difficult at this point in his life to thread the course of his life. He tried without success to incorporate both the Twillingate Coal Company and the Twillingate Electric Power Company. By 1919 he was back at sea as skipper of a coasting schooner, *Rolling Wave* and he owned a couple of schooners. Finally, by 1927 he seems to have swallowed the hook and come ashore.

Froude's reflections and comments on a number of aspects of life and work at sea are of particular interest: the sailor's duty on board ship, the watch system at sea, the compass and the log, knots and miles and the lead, names of sails and ropes, climates and polar circles, and so on. Finally, and not at all least, is his account of the distance of 159,700

sea miles that he ran on his voyages.

There is an undoubted attraction and poignancy to much of Froude's account. He was without question a memorable seaman, and despite the drawbacks of spelling and confusion in its layout, this volume will most certainly find a sympathetic understanding in those acquainted with the life of the sail-trained mariners of his era.

Harry Murdoch
Toronto, Ontario

Geoff Meggs and Duncan Stacey. *Cork Lines and Canning Lines: The Glory Years of Fishing on the West Coast*. Vancouver: Douglas & McIntyre, 1992. 166 pp., maps, illustrations, photographs. \$35, cloth; ISBN 1-55054-050-5.

Like that of the east coast, the British Columbia fishing industry, devoted chiefly to salmon, herring, halibut and ground fish, has had its ups and downs, boom and bust, surfeit and shortage of fish. Management has been abysmal, and it is only through nature's generosity that the great fish stocks, particularly salmon, have survived the ravages of man, and still provide a living, often a precarious one, for coast fishermen. *Cork Lines and Canning Lines* is essentially a picture book of the fishing industry, past and present. The authors combed the archives and the fishing companies for a magnificent collection of 150 photographs, many of which have never been published before. Their effect is emphasized by fine glossy paper and wide margins.

The text accompanying the photographs gives a capsule history of the fishing industry, from the first cannery of 1867 to the consolidation into two or three major companies today. Many aspects of the salmon fishing industry are covered, such as the great strike of 1913, when the militia were called in to force the fishermen back to work, the great Hell's Gate slide of 1916, which practically wiped out whole generations of sockeye salmon, and the racial quarrels between white, native and

Japanese fishermen on the fishing grounds.

Both authors are well-informed on their subject. Geoff Meggs is past editor of *The Fisherman*, organ of the United Fishermen and Allied Workers' Union; Duncan Stacey is an industrial historian. Any bias they show is natural, given this union background. The UFAWU has always been a tough left-wing union, fighting vigorously to raise the standards of its members. By 1944, union fishermen and shore workers enjoyed better prices and wages, with the industry's first sick pay, vacation pay and overtime pay. Race discrimination and labour contractors were wiped out soon after the war.

The book ends on an optimistic note for the sockeye runs; the Adams River run every four years has returned to its old abundance, thanks to the construction of the Hell's Gate fishway and to co-operation between American and Canadian officials on conservation of the Fraser runs.

Norman Hacking
North Vancouver, British Columbia

Fraser Miles. *Slow Boat on Rum Row*. Madeira Park, BC: Harbour Publishing, 1992. vii + 270 pp., maps, illustrations, photographs, appendices. \$26.95, cloth; ISBN 1-55017-069-4.

Prohibition in the United States continued for some years after it was abandoned in Canada and started a Canadian industry, usually called rum running, that left a legend of excitement, romance and wealth. On the Pacific coast it contributed a fascinating chapter to maritime history through the exploits of the crews of the Canadian vessels that operated to points off the American coast. The business was simple in concept but required considerable organization. Vessels, well stocked with liquor, were dispatched to stations in international waters to transfer cargo to fast "shore" boats which smuggled the liquor into the United States. Resupply meant either a return to Canada or a rendezvous with a larger

supply ship such as the legendary schooner *Malahat*. During the 1920s and until prohibition was lifted in 1933, the trade was lucrative but it left little documentation for obvious reasons. "Rum runners, as a group," notes the author (p. 3), "made the Sphinx sound like a chatterbox." Consequently, an aura of mystery has evolved around their operations. Fortunately, Fraser Miles kept a diary and carried a camera to record some of what happened.

This is a personal recollection, not a formal history, and is generally limited to the author's experiences. The writing is conversational, unembellished and friendly with a nice touch of humour. The first section is devoted to the author's boyhood days at Mission, BC. His father, a gas victim in World War I, suffered from tuberculosis and the family had few resources. Miles completed most of high school and later took a wireless operator's course at the Sprott-Shaw school in Vancouver. Then in December 1931, by accident rather than design, he signed onboard the *Ruth B*, a sixty-one foot rum runner and former fish packing vessel, as wireless operator and second engineer.

Miles found rum running more routine and boring than dramatic and exciting. His career continued until September 1933 when the trade was nearing its end. He worked off Vancouver Island and the Washington coast and also off San Diego and northern Mexico. The conditions ranged from horrible to pleasant, the food from barely tolerable to excellent. "The *Ruth B*'s miseries" (p. 148), "were as much mental as physical but went on day after day, month after month."

The book closes with forty pages of appendices, including an overview of rum running, extracts from US Coast Guard reports, an interview with Jack Adams, about which the author cautions (p. 243) "you can believe as much of this as you want to," an interview with Clarence Greenan, another rum runner, a brief discussion of some of the legalities of rum running, and a listing of many vessels involved in the trade.

This is an enjoyable account of one

man's experiences from a little recorded chapter of Pacific coast maritime history. One doesn't find a twentieth century pirate, just a young man trying to work his way out of the Depression to go to university.

Robert D. Turner
Victoria, British Columbia

James E. "Ted" Wilson with S.C. Heal. *Full Line, Fully Away: A Towboat Master's Story*. Vancouver: Cordillera Publishing Company, 1991. 168 pp., photographs. \$16.95, paper; ISBN 1-895590-00-0.

Claiming that his writing skills were not up to a book-length product, Ted Wilson has used co-author (and it would seem publisher, but this is not acknowledged as such) Heal to polish his writing and provide additional historical material. This is an admirable attitude. However, a good editor should be able to do as much, if not more. An experienced editor's touch for organisation, grammatical writing and clear, unstilted English would certainly have improved this book. The frequent use of passive voice takes away from what could have been a lighter, more fluent autobiography.

The book is a chronological account of Wilson's life from boyhood in Victoria, BC through to tug skipper and then ashore until his retirement as port captain for Seaspan International, British Columbia's largest tug and towing company. In 1933, after some experience on a tug and garbage scow, Wilson, at age 14, talked himself into a job aboard a Norwegian tramp carrying lumber to Shanghai and spent the next several years on and off going deep sea. The accounts of these early days give excellent insight into life at sea at the time, albeit from the perspective of a teenager with a privileged background who was not forced to work at sea in the height of the Depression. It also brings home how dangerous this life could be. Wilson witnessed some senseless deaths and was seriously injured himself on several occasions.

The author spent most of his working life on BC coastal towboats, and provides a very personal account of the trade, the tugs and the people at the time of tremendous growth and change from the 1940s to 1970s. The BC industry has its own idiosyncrasies, and many of these are pointed out, such as the distinction that a scow is wooden and a barge is steel hulled. A few unexplained terms do show up from time to time such as "salt-chuck," a BC term meaning salt water.

His insights into people and practices provide important information on the who, what and when of BC tugs, although for a wider readership a bit more emphasis on the why would have helped. The author's charm and sense of humour shine through and it is obvious that he made many friends. Wilson was there when it all happened and his account of the many mergers which produced Seaspan, and of Rivtow Straits, is more personal than most, giving a human face to some of the machinations behind the many changes.

Wilson's last job with Seaspan, as port captain, gave him the responsibility to investigate all accidents which befell Seaspan's tugs and barges. His accounts of these and many other anecdotes during the course of the book, are informative, and cautionary to prospective skippers, although a knowledge of the BC coast or a good map would be helpful to any serious reader. Such maps may, however, be well beyond the scope of a modestly priced book such as this.

Though the book is generously illustrated with photographs of almost every vessel named, an index of names and photos would be useful, and it would have helped had the photos been tied more closely to the text. The book is a highly readable one, with a good balance between ships, people, anecdotes and documentation. The absence of an experienced editor and a proofreader mar what otherwise would have been a good product from a small publisher seeking marine subject matter.

M. B. Mackay
Halifax, Nova Scotia

Jean Edward Belliveau, Silver Donald Cameron and Michael Harrington. *Iceboats to Superferries: An Illustrated History of Marine Atlantic*. St. John's, NF: Breakwater Books, 1992. viii + 175 pp., photographs, plates, maps. \$29.95, cloth; ISBN 1-55081-027-8.

In this handsome and well-produced book, the talents of three "regional" author-journalists were enlisted to prepare a corporate history of Marine Atlantic. This federal crown corporation, created in 1986, provides the Atlantic provinces with ferry and coastal shipping services. But like so many modern transportation companies, its current operations are intimately connected to a memorable past. Despite new technology, "super ships," computerized terminals and containerized traffic, the sea routes and ports of call remain historically accustomed. Indeed, the experiences and stories of today's ferry men and women are remarkably similar to those of their forebears.

Jean Edward Belliveau examines events leading to the creation of the new corporation, concentrating on the years after Newfoundland entered the Canadian federation in 1949. His focus is therefore the joint management of ferry services in the region by the federal Department of Transport and Canadian National, which added the operational responsibility for Newfoundland's rail and ferry system to its already considerable interests in Atlantic Canada. The narrative is well-informed and chronological, albeit somewhat circumspect in its examination of the administrative and financial relationship between CN and its bureaucratic masters. Of particular interest is the manner in which federal transportation policy affected CN's corporate decisions regarding its ferry business. Several passages, however, provide welcome glimpses of the tension which existed between the federal government's vision of a total transportation network linking rail and water and the local entrepreneurial conception of a ferry service working independently and free of the operational encumbrances dictated by the traditional railway connection.

Belliveau's "corporate" narrative is followed by Silver Donald Cameron's literary historical reminiscences of ferrying activity in earlier times, coupled with astute observations upon the ferry business during the last three decades. In one sweeping segment, Cameron takes us from Champlain's arrival in 1604 through the age of sail in the Bay of Fundy and the arrival of the railways, inevitably to focus on the St. John to Digby traverse and the CPR "Princess" ships, all spicily interspersed with tales of seafaring and ferry passenger lore. He then treats the commercial "link" between the mainland and Prince Edward Island. Served by iceboats in the winters before ice-breaking technology, then by government and railway-connected iron-sheathed and steel-bedded steamers, the story ultimately arrives at the contentious issue of the "bridge." Cameron avoids a direct opinion upon its potential utility (though he questions its practicality), yet he cannot resist allusions to the bureaucracy and business interests of Central Canada. This is particularly refreshing in a literary medium traditionally meant for carefully constructed subject neutrality.

Cameron concludes with a history of ferrying in Nova Scotia. This is a solid piece of writing, more analytic and interpretive than his previous chapters, with insightful and knowledgeable comments on the period after 1945. Yarmouth provides the focal point for this story, beginning with nineteenth-century commercial traffic between Nova Scotia, New Brunswick, and the American northeastern seaboard. Though a trifle light in its appreciation of the rail transportation network of the region and the effect this had upon maritime mercantile trade routes before the building of the St. Lawrence Seaway, the narrative is generally well-informed, with some interesting details of the steamship operators and their vessels. The chapter is particularly strong on the events of more recent times, starting with the controversy over the Yarmouth-Bar Harbor run in the 1950s. Cameron provides the background to the construction of MV *Bluenose* for the Yarmouth ferry trade and its

subsequent operational career, accident-prone, unseaworthy, yet commercially highly successful. He traces the arrival of new ships and services in the 1970s and 1980s, climaxing with the *Jutlandica*, renamed *Bluenose*, a super-ship of Swedish construction which revolutionized the ferrying business in Yarmouth. By the time Marine Atlantic arrives on the scene, we are once again embroiled in politics, attending the vacillations of the national Transport Minister upon the fate of the federal financial subsidy for the corporation: "The *Bluenose* is, after all, a political vessel."

Michael Harrington's piece on Newfoundland combines a knowledge of seafaring with an understanding of its domestic politics and historical situation. Beginning with a brief account of Newfoundland's nineteenth-century transportation fortunes on land and sea, he chronicles the activities of the Reid Newfoundland Company which exercised a virtual monopoly after 1898 over Newfoundland's communications infrastructure in exchange for undertaking certain (and in the end unsupportable) commercial transportation works and enterprises, including the creation and management of a coastal steamer and gulf ferry fleet. When the Reid Company is nationalized by the Newfoundland government in 1924, the story switches to the Commission of the Newfoundland Railway and the purchase of the Dutch-built *Caribou*, later to the seven-man Commission of Government and its addition to the fleet of the *Northern Ranger*. Harrington passes quickly over the World War II period to evaluate the effects of Confederation and the Terms of Union upon the transportation infrastructure in Newfoundland, including Canada's commitment to provide and maintain a freight and passenger steamship service between North Sydney and Port aux Basques capable of carrying motor vehicles. Harrington's assessment of this service is moderately favourable, at least until the decade of the 1970s, when Newfoundlanders began questioning Ottawa's intentions concerning the promise to support "a strong,

effective, and permanent ferry link" to the mainland. He rightly and roundly criticizes the narrow-mindedness of unifying rail and sea in the Canada-Newfoundland context through the operations and managerial auspices of the CNR, which inevitably tied a former and potentially successful commercial enterprise to an enormous corporate debt-burden. He suggests that Ottawa failed to recognize the "special case" of Newfoundland as a maritime nation (in contrast to Canada), pointing to the Diefenbaker government's Macpherson Royal Commission on Transportation, which first offered the concept of a total transportation system for Canada and whose recommendations have fashioned federal transportation policy ever since, as one of the prime culprits. This dashed any immediate hopes for an autonomous coastal and ferry service operating out of Newfoundland. Not surprisingly, Harrington views the arrival of the Marine Atlantic Corporation quite positively. Not only did it begin finally to address Newfoundland's historico-geographic situation but it has shed the burden of Canada's recent national transportation policy and some of its operational baggage. At least so far.

Altogether, given the traditional disposition of the genre, this book was surprisingly a pleasure to read. It is well-written and informative, constructively planned, and accessible to the general reader, yet it does not shy from historical analysis and interpretation. There is something here for everyone. Both the Corporation and its chosen authors are to be highly commended.

Richard G. Brown
Ashton, Ontario

William Oxford. *The Ferry Steamers: The Story of the Detroit-Windsor Ferry Boats*. Erin, ONT.: Boston Mills Press, 1992. 128 pp., photographs, illustrations, maps, appendices, bibliography, index. \$14.95, paper; ISBN 1-55046-078-1.

This book tells the story of the various pass-

engers and vehicular ferries across the Detroit River between Windsor, Ontario and Detroit, Michigan. The story, told in thirteen chapters, begins with the carrying of passengers in canoes in the early 1800s and finishes with the withdrawal of the Walkerville-Detroit ferry *Halcyon* in May 1942. Since these ferries provided necessary transportation, their history deserves recording.

Generally, this recording is adequate until the end of Chapter VII, that is, until 1891. To that point, several individual operators, each with one or two small steamers had supplanted the canoes. Then, in 1877, as the need was felt for larger and more expensive steamers, the individual operators amalgamated to form The Detroit and Windsor Ferry Company. Thereafter, and over a thirty-year period, the Ferry Company and the City of Windsor engaged in a series of hassles over franchises, fares and dock facilities which Oxford covers in three chapters. However, while these hassles probably dominated the newspaper accounts of the period, the ship historian is left wondering as to what vessels were in service and, also, what happened to the vessels which were new in Chapter VIII? While the City of Windsor was fussing about the fares, the service in, say, 1920 seems to have been provided by such relics as the *Victoria* and the *Excelsior*, vessels dating back to the 1870s. The historian will also be disappointed by the numerous errors in these later chapters. For example, the seven remaining ferries in 1938 are listed as *Garland*, *Promise*, *Pleasure*, *LaSalle*, *Cadillac*, *Ste. Claire*, and *Columbia* (p. 96n). However, *Garland* and *Promise* were both long gone by 1938, and one can only wish that the author had correctly stated where. The list also omits *Britannia*, despite the fact that she is pictured with the idle ferries on page 99. Moreover, that list contradicts the statement (p. 104) that *Britannia* and *Fortune* were two of the last ships. Such erroneous fleet references should have been avoided through a careful review of the relevant marine records and, in the case of *Britannia*, through better proof reading.

Still, on balance the book is worth having for the price; it is well illustrated and has a good bibliography and chapter notes. The ship historians will, however, be disappointed by the later chapters.

Gordon C. Shaw
Thornhill, Ontario

David Plowden. *End of an Era: The Last of the Great Lakes Steamboats*. New York: W.W. Norton & Company, 1992. 155 pp., photographs. Cdn \$60, US \$50, cloth; ISBN 0-393-03348-1. Canadian distributor, Penguin Books Canada Limited, Toronto, Ontario.

In just thirty-two pages of text and 110 full-page black and white photographs, David Plowden captures the sights and essence—yes, and even the feel, sound and smell—of the last conventional steamboats in operation on the Great Lakes. With words and pictures he records not only the engines and the vessels into which they were fitted but also the feelings and thoughts of the men who operate and sail them.

The first chapter is a very readable capsule history of the steam engine and its adaptation to marine propulsion, with special emphasis on the Great Lakes, where it has survived far longer than on most other bodies of water. Plowden's information is both accurate and current through the 1992 navigation season. Chapter two takes us for a voyage on the bulk cement-carrying steamer *S. T. Crapo*, which was built in 1927 and, as of 1993, is still sailing with her original triple-expansion engine, though recent reports indicate that it may soon be replaced by a diesel. We are treated to visits to all the nooks and crannies as well as insightful interviews with crew members, all the way from captain to oilers and deckhands. Having spent time aboard Great Lakes' bulk carriers myself, I felt that the narration captured the feel of being aboard. But just to be sure, I invited two retired Lakes' steamboat captains to read the book to see if my impression was correct.

They both agreed—the book captures the mood of life afloat on the Lakes. The final two chapters of text recall Plowden's voyages on eight other vintage Lakes' steamboats, none of which are operational any more.

The photographs that complete the volume demonstrate that Plowden's skill with words is matched by his mastery of the camera. Besides the usual ship portraits, they include an interesting variety of deck, engine-room, cabin and crew scenes. In fact, they are so outstanding that they have been assembled into a travelling exhibition that is touring art and maritime museums.

In this age of videotape, where it is possible to capture colour, sound and action in a subject such as steam engines, one might wonder why anyone would choose to record the theme in just words and photographs. Thank goodness that Plowden has done it—and done it so well that it is light years ahead of the numerous videos that are available on the subject. Because of its overall quality, this book, like some of Plowden's earlier works, is destined to become a classic.

David T. Glick
Matlacha, Florida

James P. Barry. *Georgian Bay: An Illustrated History*. Erin, Ont.: Boston Mills Press, 1992. 240 pp., photographs, maps, bibliography, index. \$45, cloth; ISBN 1-55046-0625.

James Barry is the author of six books on the Great Lakes. His first remains perhaps the best book on any one of the lakes: the 1968 *Georgian Bay: The Sixth Great Lake*. Anyone wanting a history of Georgian Bay is still better served in tracking down a copy of this older volume. It was, however, a small format with few illustrations. Now Boston Mills has published this coffee-table volume with all the illustrations the previous volume lacked.

There are eight "chapters" and an Introduction. None of these carry more text than the equivalent of five full pages. A few, like "Daily Life," offer a half page introduction to

over fifty pages of photographs. In this short space, Barry has little more than the opportunity to say that "photographs tell us much about the daily lives of our predecessors" and the fact that Owen Sound had a reputation as "the fightin'est, drunkenest, whorin'est town in the Province of Ontario," (p. 59) although local photographers were unlikely to have bequeathed to us a record of this particular dimension of local life.

Despite these limitations and the biases of his sources, Barry has assembled a wide range of illustrations to help the history of the region. Indeed, it is appropriate that the index is an "index of photographs" as it is largely through the photographs and their captions that the story is carried. The oversized nature of the volume allowed Barry and the designers free range in combining image and text. The result is a superbly designed volume, which at times sustains its narrative through the captions. These range from simple sentence fragments to blocks of text as long or longer than some of the putative chapter text. The spread on pages 120-121 includes four images on one page and two columns of "caption" on the second, including a summary history of the *Asia*, a discussion of her wreck on September 1882 and four lengthy quotations from the accounts of the two survivors. The presentation offers the same depth as the four-page account in Barry's previous book on Georgian Bay but benefits from its close association with the photographs, as when he discusses the risks of *Asia's* particular design, a Welland Canaller, when running light in heavy weather.

The chapters range from a historical section (the "Huron Tragedy," early white settlement), to a thematic section with chapters on daily life (largely urban), the commercial fleets, the fisheries, and the lumber trade in the fifty years to the end of World War I. The final section, "the Pleasures of the Bay" has nothing to do with the aforementioned reputation of Owen Sound. Rather it tracks the development from the nineteenth to the twentieth century of middle-class Ontario's

fascination with recreational opportunities in the region. Winter sports are represented but the permanent residents are outweighed by the rush of summer people: hunting, fishing, bicycling, picnicking, automobiling, sailing, canoeing, rowing, and swimming. They patronize grand hotels, and build small and grand cottages. Almost as an afterthought is a photograph of a swarm of automobiles on Wasaga Beach in 1964. (231)

Barry's photographs are drawn from a wide range of sources. The usual Great Lakes collections are well represented, as are local institutions like the County of Grey-Owen Sound Museum, the Bruce County Archives, the Parry Sound Public Library and the Huronia Museum. Perhaps the greatest strength of the volume is a minor theme running through it: the family photographs of Barry's maternal grand-parents, the Potvins of Midland. Among these are images of James Playfair, Midland's shipping magnate, relaxing on his yacht in the 1920s.

There are already, no doubt, a significant number of coffee tables in the Georgian Bay area graced by the presence of this volume. To the marine historian it provides a useful complement to Barry's 1968 history.

Walter Lewis
Acton, Ontario

Daniel K. Ray. *Water Works 1991: A Survey of Great Lakes/St. Lawrence River Waterfront Development*. Boyne City, MI: Harbor House, 1991. 72 pp., photographs, tables, maps. US \$16.95 (+ \$2.50 postage & handling), paper; ISBN 0-921578-06-7.

Since the beginnings of European settlement on the shores of the Great Lakes and St. Lawrence River, the water's edge has been reshaped to meet the changing requirements of its inhabitants. Protective works such as groynes and breakwaters have redirected the natural forces of these waterways, and the reclamation of water lots and wetlands created new spaces for industry, commerce and recre-

ation. The balance between these land uses has constantly evolved to reflect the region's changing economy and transportation systems. The impact of recent events upon urban waterfronts has been summarised in this brief but informative work prepared by Daniel Ray on behalf of the Center for the Great Lakes.

Much of the information that supports this publication came from the Water Works 1990 conference that the Center hosted with the International Great Lakes-St. Lawrence River Mayors' Conference. The speakers' remarks were combined with the results of a telephone survey, material that appeared in the *Great Lakes Reporter*, and additional research to update the Center's initial overview published in 1986. Industry and port-related activities continued to give way to more than 190 projects that were planned, approved or implemented during those five years. Ray's book profiles eighty-one of these projects with the intention of strengthening the communication among those involved in waterfront development by offering an assessment of the trends and pitfalls that have emerged on both sides of the border.

Six case studies are presented in detail, including a discussion of the successful redevelopment of Montreal's waterfront and the various problems that plagued privately-sponsored projects in Québec City during the late 1980s. Access to the water's edge is identified as perhaps the most important key to successful planning, along with seven other criteria that include the need to accommodate port-related industries and the need for regional partnerships to achieve large-scale solutions. This analysis is based upon the community profiles that make up the majority of the book as its compiler starts with projects on Lake Superior and gradually works his way east. Other themes emerge along this trip, such as the marked difference in the approach to waterfront development taken by communities surrounded by rural or industrial hinterlands, and that Canadian initiatives lag behind the pace of planning and realisation set by projects in the United States.

Heritage plays a role in a number of projects (such as the adaptive reuse of a power station and brewery in Milwaukee, and the prominence given to historic vessels at Hammond and Cleveland), but it is apparent that the construction of marinas, residential units and shopping areas provides the principal focus for development proposals. The book closes with a useful matrix giving the location, purpose and funding of projects that provides a measure of access to the book's contents when used with the geographical index, as well as a list of sources for additional information that features recent studies and reports, and the addresses of conferences and associations.

Water Works 1991 is written in straightforward prose, supported by a generous number of photographs. The illustrations are generally well chosen, but a greater use of design drawings might have conveyed a better sense of the overall approach to shoreline planning. There are few errors in the text, and the more apparent miscues concern names that are wrong or spelled irregularly, such as references to the "Ontario Legion" (p. 48) and to the Outer Harbour Marina and its manager (p. 61). However, these are minor problems, and the book succeeds in providing a useful overview of initiatives throughout the region that will assist individuals involved in such projects to take advantage of this growing wealth of experience. The book will also serve a much broader community of readers. By capturing a sense of the region's overall direction at a time when the economy was at its peak, *Water Works 1991* will become a benchmark against which to judge the impact of the severe recession that has robbed the region of much of its momentum. Its significance will continue to increase should the Center undertake a similar census of waterfront development in another five years, and document the effects of this economic downturn.

Michael B. Moir
Toronto, Ontario

Roberta M. Styrán & Robert R. Taylor. *Mr. Merrill's Ditch: A Welland Canals Album*. Erin, ONT.: Boston Mills Press, 1992. vii + 152 pp., maps, illustrations, photographs, glossary, index. \$19.95, paper; ISBN 1-55046-005-6.

This slim volume is what may be termed an illustrated historical geography of the four Welland Canals. *Mr. Merrill's Ditch* takes the form of a scrapbook assembled in twelve chapters. Included are a variety of photographs, drawings, plans and newspaper clippings. While very much a "picture book," the captions are written in a scholarly but not pedantic fashion.

It is a companion to the authors' earlier *The Welland Canals: The Growth of Mr. Merritt's Ditch* (Boston Mills, 1988). A second book was necessary because the authors had accumulated more primary material than could be included in the first volume. They also wished to raise some themes which had not been touched upon in the previous study. Among the new topics are the intrinsic beauty of the canals' forms and structures and the history of advertising and promoting the canals. One theme that does recur as a major focus is "the contrast between romance and reality." Here the authors are concerned with the Victorian perception of the romantic landscape. We are also provided with idyllic scenes of rural peace and serenity contrasted with bustling industry. It should be noted that the introduction contains one questionable assertion. The map showing the routes of canals notes that the third Welland Canal was completed in 1881. This is not strictly correct. The third canal was completed in two stages; the first stage opened to a depth of twelve feet in 1881, but the final fourteen foot depth was not completed until 1887.

Of particular interest are the chapters on Milling and Manufacturing, Trade and Commerce, Advertising and Promotion, and Creating Employment. The water power provided by the first Welland Canal immediately attracted flour and grist mills. Indeed, the

canal triggered the creation of entire industrial towns such as Welland and Thorold. The chapter on Trade and Commerce includes the usual ship photographs and bills of lading but there is no mention of such documents as toll registers. It would be a worthwhile exercise to compare the toll registers with the marine transits given regularly in contemporary newspapers. Were the newspapers accurate enough to be used as a surrogate for the official records? The Advertising and Promotion chapter highlights a neglected source, contemporary advertising and ephemera. The twelve pages on Creating Employment reminds us that the canals were primarily a place where men and women earned their daily bread. Irish immigrants dying of cholera and the new proletariat of the late nineteenth century are part of the story of the Welland Canals.

Mr. Merritt's Ditch is a fine historical album and a useful companion to the authors' earlier *The Welland Canals*.

M. Stephen Salmon
Orleans, Ontario

Douglas S. Johnson. *Charting the Sea of Darkness: The Four Voyages of Henry Hudson*. Camden, ME: International Marine Publishing, 1993. xiv + 242 pp., figures, maps, appendices, notes, bibliography, index. US \$22.95, cloth; ISBN 0-87742-321-0.

Donald Johnson has written a well-researched and highly readable book on Henry Hudson, a navigator and explorer who is generally ignored yet who crammed four remarkable voyages into four years, from 1607 to 1610, in attempts to reach the Orient by either a North East passage, north of Russia or a North West passage through Canadian Arctic waters.

Like other writers on Hudson, Johnson's research on the explorer's early life was unsuccessful. His birthplace and parentage have apparently never been discovered and there is nothing recorded as to how and where

Hudson learned his seagoing skills. Johnson therefore begins with an excellent account of early thirteenth and fourteenth century voyages westward and northward from Europe which sets the scene; prologues and epilogues to each voyage also summarize their intentions and results.

Hudson must already have been an experienced shipmaster when the Muscovy Company of England appointed him Master of their ship *Hope-Well* in May 1607 to seek a passage north of Spitsbergen. The ship was back in the Thames in September. The details of this voyage and the other three are well covered in the Journals, giving the reader a full experience of the difficulties and hardships in sailing the small clumsy ships of the era. The 1607 voyage was unsuccessful but the discovery of vast numbers of whales north of Norway started a lucrative industry. The 1608 voyage to the Kara Sea, North Russia and then eastward was another failure. *Hope-Well* came home with a disgruntled crew who refused to sail west across the Atlantic to seek a North West passage. In effect, the crew had mutinied.

In 1609 Hudson sailed for the Dutch United East India Company in the *Half-Moon*. Johnson's description of this voyage is particularly good. Hudson attempted to carry out his orders to try initially for a North East passage, sailing from Amsterdam on 26 March. Once again there was a mutiny on board off Northern Norway and Hudson decided to head west to warmer waters. In so doing he finally discovered Delaware, the Hudson River and the site of New York. The *Half-Moon* returned to England on 7 November, 1609. The epilogue discusses Hudson's geographic appreciation of his options in the search for the North West passage with eminent cartographers of the day, while the first appendix contains excellent descriptions of the ship *Half-Moon* with detailed drawings. Of particular interest is the 1989 replica of the ship built in New York and now berthed in Jersey City, New Jersey.

Significantly, the Journal of the 1609

voyage was written by Hudson's mate, Robert Juet, a devious bully who had no time for Hudson. Unfortunately the relationship between the two men in a ship sixty-five feet long is not clearly defined. This is characteristic of Johnson's approach, for he fails to explore the character and personality of Hudson himself. He was a great navigator and explorer but he was not a great leader of men. He would compromise with the crew; this would eventually lead to the tragedy in Hudson Bay in 1610 and loss of his own life and those of the others in the open boat.

That final, ill-fated voyage under the auspices of an independent group of English merchant adventurers in the ship *Discovery* with Hudson and a crew of twenty-three began in April 1610. Once again Robert Juet was the mate. The Journal tells the whole tragic story of a rebellious crew and a Master who did not know how to handle them. In the end, Hudson and eight men were cast adrift in an open boat in Hudson Bay.

In summary, this is an excellent book but I would like to have heard more about Hudson's problems with his crews.

Tom Irvine
Nepean, Ontario

David F. Marley. *Pirates and Engineers: Dutch and Flemish Engineers in New Spain (1607-1697)*. Windsor, Ont.: Netherlandic Press, 1992 [order from General Publishing, 30 Lesmill Road, Don Mills, Ontario M3B 2T6]. 79 pp., illustrations, maps, sources, index. Cdn \$9.95 (outside Canada, US \$11.95), paper; ISBN 0-919417-28-0.

This work is composed of eight tales drawn from the records of the Spanish inquisition and other official documentation in the *Archivo General de la Nación*, Mexico. The purpose is to illuminate the fortunes, or more frequently misfortunes, of some of the Dutch and Flemish who ventured into Mexico during the seventeenth century. The central figures range from long-forgotten shipwrecked sailors

and moderately successful privateers, through to a Flemish armourer who resided in isolated New Mexico for several decades and Adrian Boot, a native of The Hague, who held the post of King's engineer for Mexico between 1613 and 1637.

The stories are lucidly and readily told. The author is well versed in the material, and its context. The notes reveal extensive reading and the use of a number of unpublished doctoral dissertations. The principal limitation is that in most instances the documentation is disappointingly thin. All too frequently the author has succeeded in interesting the reader in a particular adventurer, only to run out of material with the story half told. Maritime themes are present, but are really only developed in the context of dyewood interlopers on the Yucatan coast during the 1670s-1680s.

Apart from the charm of individual tales, the principal value of this volume lies in the further exposure of the heterodox European population of New Spain, alongside the standard efforts of the Church to enforce religious uniformity.

J. D. Alsop
Hamilton, Ontario

Les Harding. *The Voyages of Lesser Men: Thumbnail Sketches in Canadian Exploration*. Waterloo, Ontario: Escart Press, 1991. 160 pp., maps, illustrations, bibliography, index. \$16.95, paper; ISBN 0-9692383-5-5.

Apart from one of the lesser mortals being a woman, the title describes the book accurately. Harding gives a short account of the lives and travels of twenty-one voyagers whom he does not consider to be major figures in Canadian history but who made some significant contribution to geographical knowledge. No two authors would choose the same names, but Harding has made a plausible selection, dividing his accounts between the three coasts of Canada and the interior. He begins with John Davis (1550-1605), for whom Davis Strait is named, and ends with

Mina Benson Hubbard (1870-1957), who travelled across Labrador and mapped it after her husband had starved in an earlier attempt to do this.

Harding abides by his own criterion. Thus, he selects Casson, the priest who accompanied La Salle, rather than La Salle himself. In some cases he accepts without comment some suspect accounts, such as the memoirs of Henri de Tonty which describe his own heroic actions. He avoids the same trap with John Meares, whose contemporaries, says Harding, "record[ed] that he was pretentious, unscrupulous, and definitely no gentleman." (p. 77)

Harding has worked entirely from published sources, which he lists in his bibliography. This is an acceptable approach for a series of "thumbnail sketches," but over half his sources are before 1940, and for some of his subjects, later works are available. A bit more study would have enabled him to avoid some of the lacunae and errors in his sources, none of which are important to non-specialist scholars.

Harding has some interesting tales to tell, and he tells them well. There is certainly room for a book of this nature. There is also room for a monograph on the redoubtable Mrs. Hubbard. Let us hope Les Harding will oblige us.

John Kendrick
Vancouver, British Columbia

Geoffrey Irwin. *The Prehistoric Exploration and Colonisation of the Pacific*. Cambridge & NY: Cambridge University Press, 1992. viii + 240 pp., figures, tables, photographs, bibliography, index, cloth; ISBN 0-521-40371-5.

When in the course of his three exploratory voyages of the Pacific James Cook wondered about the vast area occupied by the Polynesians, he was voicing an astonishment that led to many historical or quasi-historical efforts to answer the question of their migrations:

How shall we account for this Nation spreading itself so far over this vast ocean? We find them from New Zealand to the South, to those islands to the North and from Easter Island to the Hebrides. (Cook, cited in Beaglehole, *Life*, p. 279)

It was essentially the Cook voyages that delineated the enormous triangle of island-dotted sea occupied by the Polynesians. The Spanish and Dutch before him had provided some clues to the extent of what became known as Melanesia and Micronesia, but Europeans were at a loss to explain the staggering scale of the Polynesian wanderings when contrasted with the apparent limitations of their technology at the time of European contact. It was assumed simply that at some time in the last thousand years the island groups of the open Pacific were settled in a wasteful and random scattering of human seeds from west to east, rooted in the similar societies of southeast Asia. At least one non-scientific theorist, the Norwegian Thor Heyerdahl, proposed an American origin for the Polynesians, backing his claim with an epic log raft voyage which proved only that such craft could cross the Pacific and that Heyerdahl was a brave man.

Geoffrey Irwin, a competent and computer-literate New Zealand archaeologist and blue-water sailor, took a more reasoned approach to the question of indigenous Pacific migrations, backed by extensive archaeological research, the innovative use of computers, and personal sailing experience in the islands. The book concerns itself with what Irwin establishes as two distinct periods of voyaging and colonization. The first began some 50,000 years ago in southeast Asia, and reached almost to the Solomon Islands; the second began 3,500 years ago, and ended only a few hundred years before the Europeans came on the scene, completing the occupation of Micronesia and Polynesia in what Irwin calls a "burst of sophisticated maritime and neolithic settlement of the Pacific."

Irwin carefully details the archaeological

evidence that supports the theory that the Pacific sailors of this neolithic settlement wave operated ocean-capable double canoes in excess of twenty metres in length, and used star- and swell-based navigation methods which were highly effective in open ocean passage-making. The craft themselves, in decline and disuse for the most part when Europeans arrived, worked to windward through an ingenious method of reversing direction and carrying the tack of the great crab-claw sails aft to form a new bow, with new steering paddles put out. Having established in a crisp but fascinating style the technical capacity for successful voyaging, Irwin then goes on by the use of computer voyage simulations to demonstrate that the archaeological evidence of the progression eastward of the neolithic "Lapita" culture suggests anything but a hit-and-miss voyaging style. He proposes that the voyagers prudently sailed the safest route, which was directly upwind into the Trades; the canoes could tack effectively, and an expedition running low on supplies, or simply lost, could likely get home safely by running off easily downwind. Expeditions *across* the Trade Winds came later, once the principal "corridor" of upwind, easterly courses was established.

By this means Irwin presents a sequence of settlement in the Wind Corridor, "up" from the Solomon Islands to Easter Island; the early northwestward curve into the Micronesian group, and finally the Hawaiian and New Zealand settlement voyages across the wind, which departed from a central point in either the Society or Cook Islands. In each instance the computer simulations were used to establish an acceptable survival and/or landfall rate in the voyages, and the settlement tracks thus arrived at do compare with the archaeological record correspondingly. The achievement of these neolithic seamen becomes apparent as Irwin makes his case for a prudent and cautious voyaging drama that brought human beings to some of the most remote, and most lovely, spots on earth. On Pacific bookshelves already bearing Van

Loon, Suggs, Beaglehole and even Hiscock, Irwin's efficient but readable work deserves a special place.

Victor Suthren
Ottawa, Ontario

Anne Salmond. *Two Worlds: First Meetings Between Maori and Europeans 1642-1772*. Honolulu: University of Hawaii Press, 1992. xi + 411 pp., illustrations, maps, photographs, appendix, notes, bibliography, index. US \$38, cloth; ISBN 0-8248-1467-3.

The Age of Discovery brought together Europeans and indigenous peoples in various places around the globe. In *Two Worlds*, Anne Salmond has recreated the first meetings between the Maori and the crews commanded by Tasman (1642), Cook (1769-70), Surville (1769) and Marion du Fresne (1772), attempting in the process to convey the contact experience from both the European and native points of view.

Her work brings places and people to life. It is sufficiently to vivid to almost make it possible to picture New Zealand's coasts, to imagine an imposing Maori warrior adorned with tattoos and hair feathers, and to sense the relief with which men long at sea finally sight land. Sketches of the societies represented in these encounters enrich the text for the non-specialist. They include the Polynesian migration to New Zealand (ca. 800 AD) and the subsequent evolution of a distinctly Maori culture, as well as miniature portraits of life in the Netherlands, England and France at the time of the first meetings.

The various contact experiences were themselves very different. More than a century after Tasman first discovered "Zeelandia Nova," Cook and the crew of the *Endeavour* circumnavigated the North and South Islands. Their earlier exposure to Polynesian languages and customs, the linguistic skill of the Tahitian priest who became their translator, and the thoroughness with which observations were recorded made this voyage the most

successful. But it was du Fresne's arrival two years later and his murder at the hands of the Maori that ultimately discredited European notions of indigenous peoples as innocents in paradise.

The difficulties inherent in projects of this type are enormous. Although Ms. Salmond's objective was to describe early Maori-European contact with judicious regard for the native position, the written records upon which she necessarily relied most heavily were European accounts of the events—journals and ships' logs. The tribal records consulted were created decades later, many under European auspices. Anthropology and tribal cosmology provide invaluable insights, but unavoidably function as secondary or supporting sources. Hence the source base itself was a major obstacle to the truly balanced account the author hoped to achieve.

Ms. Salmond's research convinced her both that traditional accounts incorrectly presented pre-contact Maori society as static and homogeneous and that seventeenth and eighteenth century Europeans were not simply ancestors who thought essentially as we do, but were defined by a distinct world view that reflected their own particular time and place. Both observations are valid but the evidence for the former is more substantial.

Maori society was geographically differentiated and in continual flux, with significant differences in material culture. At the same time, in spite of the absolute differences in the conduct of the four voyages, their objectives, their sponsors and the nations which gave them political legitimacy, the Europeans who participated reflected aspects of the "Europeanness" that linked them to each other and to a common European culture.

Two Worlds is an exciting introduction to a part of the Southern Hemisphere unfamiliar to many readers in North America. It is well written and beautifully illustrated.

Judy Bruce
Berkeley, California

Robin Inglis (ed.). *Spain and the North Pacific Coast: Essays in Recognition of the Bicentennial of the Malaspina Expedition, 1791-1792*. Vancouver: Vancouver Maritime Museum, 1992. vi + 197 pp., maps, illustrations, photographs, appendix. \$24.95, paper; ISBN 0-9695221-3-4.

This book is a collection of papers given at a symposium held in Vancouver in 1991 to commemorate the presence of the Spanish explorer, Alejandro Malaspina, on the northwest coast two hundred years before. Malaspina commanded an expedition sent to the Pacific to carry out broad scientific enquiry in the tradition of James Cook's earlier voyages. The Malaspina expedition twice touched the northwest coast. The main expedition sailed from Acapulco in 1791 to explore the northern coast between Mulgrave and Prince William Sounds, before sailing south again to visit the Spanish settlement at Nootka Sound. The following year Malaspina sent two tiny vessels, *Sutil* and *Mexicana*, under Galiano and Valdés, to investigate the waters between Vancouver Island and the mainland in case the Strait of Juan de Fuca might lead to a waterway to the Atlantic. Like many Spanish expeditions, Malaspina's has not been fully appreciated, in part at least because his achievements were not well publicized at the time. This collection is an effort to rectify that neglect by shedding some scholarly light on Malaspina and the men who sailed with him.

It is not possible in a short review to do justice to each paper in this collection. Inevitably, they vary in quality, their use of sources and contribution to knowledge. Some, like Richard Inglis' essay "The Spanish on the North Pacific Coast—An Alternative View from Nootka Sound," are opinions based on limited research. Others, such as Christon I. Archer on "The Political and Military Context of the Spanish Advance into the Pacific Northwest" and Alan Frost on "British Ambitions Concerning the Western Coasts of the Americas, 1763-1793," are substantial contributions based on a great deal of documentary

evidence. The volume also contains everything in between.

One can, however, comment on the overall nature of a collection like this, even in a short review. Collectively the essays deal with Pacific exploration very much from the European perspective. There are essays dealing with the background of the Malaspina expedition, the activities of other European nations in the Pacific and some of the individuals who sailed with Malaspina, and achievements of the expedition in various areas of science. There is not much here on the native peoples of the northwest coast, although Richard Inglis does clearly draw our attention to the need to hear the native voice and Paz Cabello has contributed an essay on Spanish ethnographic collections.

These papers were given at a conference the year before the furore over Columbus. Certainly after 1992 we cannot look at the history of exploration and discovery in the same Eurocentric way. I am not entirely convinced either that Spanish achievements in the northwest have been "under valued in the historiography of early British Columbia," as the editor asserts in his preface. There have been numerous books and articles on the Spanish, whose presence on the coast was all in all pretty fleeting. Still, Robin Inglis and the Vancouver Maritime Museum have performed the important service of publishing a significant collection of essays soon after the conference at which they were given and in a very accessible form.

Robin Fisher
Prince George, British Columbia

Ann Savours. *The Voyages of Discovery: The Illustrated History of Scott's Ship*. London: Virgin Books, 1992. xvi + 384 pp., illustrations, maps, photographs, chronology, notes & references, selected reading, index. £25, cloth; ISBN 1-85227-117-5.

One of the last three-masted wooden sailing ships to be built in Britain, the *Discovery* was

modelled by the Dundee Shipbuilding Company along the lines of one of her namesakes, Nares' auxiliary barque. Purpose-built as an Antarctic research vessel, she was launched in 1901 and earned lasting fame in southern waters—on the National Antarctic Expedition, 1901-1904, the *Discovery* (Océanographie) Expedition, 1925-1927, and the BANZARE (British, Australian and New Zealand Research Expedition), 1929-1931.

By the 1930s, the needs of Antarctic research were being capably met by the *Discovery II* and the *William Scoresby*. Thanks to the generous help of Lady Houston, the *Discovery* was saved for the nation in 1937. Serving as a training ship for Sea Scouts, 1937-1954, and a drill ship for the RNVR, 1954-1979, she became, in her mooring at the Thames Embankment, a major London landmark indelibly associated with her first commander, Robert Scott. In 1979, she was handed over to the Maritime Trust and, in 1986, removed to what promises to be her final home in Dundee, the city of her birth. (I had the privilege of touring her in 1984 when she was being restored at St. Katharine's Dock; anyone with the slightest interest in those sturdy wooden ships that so confidently braved the high latitudes should pay her a visit.)

In *Discovery's* brief (1901-1931) sea-going life, there is an obvious gap of two decades. Few today know that from 1905 to 1922 she was owned by the Hudson's Bay Company (HBC). In 1904 the HBC's *Stork* was forced to winter over in James Bay. In urgent need of a suitable ship, the Company was able to acquire for £10,000 a ship that had cost £50,000 to build. (With pleasing symmetry, the HBC was able some years later to snap up *Maud* from the bankrupt Amundsen.)

For over half of her active life, therefore, the *Discovery* was not the feisty heroine of the Antarctic but one of many players in two great maritime dramas. Both these stories, although well-documented and certainly not kept secret, have not received the attention they deserve from maritime historians; per-

haps the absorbing chapters which deal with them in this book will inspire some readers to take up the task.

One story, which lasted over two and a half centuries, was that of the HBC supply voyages from Britain through Hudson Straits to Hudson Bay, nearly all of which voyages were made by wooden sailing vessels. The other was the "French Government Business," for such was the prosaic name which the HBC gave to its wartime work as chief shipping and purchasing agent for the French and other Allied governments, including that of Czarist Russia. Most of the *Discovery's* French government voyages were made coasting French Atlantic ports. In 1915, however, she carried munitions from France to Archangel.

As an offshoot of the "French Government Business," which alerted the HBC to the possibilities of European post-war trade, the *Discovery* was chartered in 1919 to the Merchant Trading Company (now Metco), with which the HBC was then closely linked, for a voyage to the Black Sea. She thus added Constantinople to her list of ports of call and was able to witness, in scenes that seem chillingly contemporary, the last sad days of White Russia.

To say that *The Voyages of the Discovery* is worthy of its subject is to accord it the highest possible praise. Yet it is to give it no more than its due. This is a splendid book. The author's research in both primary and secondary sources has been exhaustive and is amply documented in notes which do what notes should do, enhance the text. The research has been so admirably taken on board and is so gracefully presented that the reader can easily place the *Discovery's* voyages in their wide variety of contexts—scientific, political and commercial.

Much of the story is told in the words of the men who sailed in *Discovery*. As sailors and scientists, they tended to be keen observers and the extensive quotes from their published and unpublished writings fills the book with a wonderful sense of life and emotion. One does not read the book so much

as experience it; scenes and images linger in the mind long after one has finished reading.

An especially pleasing feature of the book is the sympathy Savours displays for the gallant little ship; to all who sailed in her, from commanders to the ship's cat; and to the denizens of the world in which she sailed, from whales to barnacles. This sympathy is very much in the spirit of *Discovery* herself. She was not a ship primarily intended to wage war, to make money or to plant the flag (although she did all these things). Her mission was to go out and see, record and help conserve the natural world.

Other features of the book that deserve notice are the selected reading list, for those whose appetites are whetted, as they surely will be, for more *Discovery* reading; thirteen useful maps, some contemporary, located on the endpapers and appropriately throughout the text; and the magnificent illustrations on glossy paper, the cost of which was partially supported by the Trans-Antarctic Association. There are fifty-one black and white and twenty-two colour images, showing the ship, people associated with her, and the lands and waters she knew. Canadian readers may be particularly taken by the Al Hochbaum oil of York Factory, looking as remote and exotic as the Convent of Solovetsk in the White Sea, shown on the next page.

Launched in what right-thinking people know to have been the first year of the twentieth century, *Discovery* took part in both the best and the worst this age of ours has had to offer. The *Voyages of the Discovery* is a book not just about a ship but about our world.

Anne Morton
Winnipeg, Manitoba

Colin S. Gray. *The Leverage of Sea Power: The Strategic Advantage of Navies in War*. New York: The Free Press, 1992. xii + 372 pp., maps, notes, bibliography, index. US \$24.95, cloth; ISBN 0-02-912661-4.

Using historical case studies ranging over

2500 years Gray shows how superior sea power generates a strategic leverage which enables wars to be won. Over that time period geography, technology and tactics have altered radically but the strategic options theoretically available to a sea power striving to defeat a land power or a land power seeking to bring down a sea power have remained generally constant. He selects his cases according to strict criteria: the conflict has to be major and between a great sea power and a great land power, although he acknowledges that his examples also reflect his Anglo-American culture and a large measure of Eurocentricity.

The first three chapters of the book set the theoretical framework for the case studies. In these he examines the nature, uses and practices of sea power and concludes that its twin tasks are to secure the seas for friendly use and to deny their use to the enemy. Because he sees sea power as having to succeed in opposition to land power, he devotes a chapter to describing how so geostrategically dissimilar an end can be reached, grasped and overcome. But as he points out, in modern times no continental state or coalition has ever won out in a war against a sea-oriented opponent.

The ten case studies draw on examples from the ancient, medieval, early modern and modern periods, beginning with the wars between Persia and Greece in the fifth century BC and ending with the Cold War of recent memory. For two thousand years, the galley reigned supreme in the confined waters of the Mediterranean. Powerful continental states wishing to achieve victory over maritime foes had to learn first to master the art of war at sea. By contrast, in the modern era, maritime states have used sea power to achieve decisive results on land. Only since the airplane has come into its own has superior airpower come to share with sea power a decisive role with respect to war as a whole.

One might complain about the narrow focus and the examples used, especially in chapters on the Age of Galley Warfare and the Age of Fighting Sail, yet there is much to

commend this study on the strategic leverage of sea power in war. The book is well written and major themes are clearly stated and well developed. Gray shows a thorough grasp of the secondary literature on the subject from which he develops a convincing if at times controversial assessment of the enduring importance of sea power in the conduct of war. Not all will agree with his opinion on the Gallipoli/Salonika misadventures of World War I nor appreciate his speculative assessment of a Soviet/NATO conflict at sea. One also wonders why he omits any reference to the Falklands War. Surely it fits the criteria and offers a striking example of how sea power can be used effectively. But, overall, this is a useful book that broadens our understanding of the nature of war, in particular the role of sea power in its successful resolution.

David Facey-Crowther
St. John's, Newfoundland

Robert Gardiner (ed.). *Warship 1992*. London: Conway Maritime Press, 1992. 256 pp., photographs, figures, maps, index. £24, cloth; ISBN 0-85177-603-5.

Books of this genre tend to be attacked on two grounds; one explicit and one implicit. The explicit criticism relates to the series' eclecticism, and indeed this volume commences with a spirited defence of heterogeneity. The implicit criticism is that analysts concerned with hardware are somehow lesser orders of men; a disdain vaguely reminiscent of the Victorian landowner's vision of men in trade. But the *Warship* annuals, which presumably bring together the best of the articles that appear in the journal of the same name, fill a very valuable niche and the analyses of ship design, battle damage, and the inventories of second rate naval powers (like the Romanian submarines featured in this volume) provide an invaluable resource for those who move above the clouds in the realm of naval policy and diplomacy.

Some of the contributions relate to the

unusual, like Kim Kirsner's account of the clash between the German auxiliary cruiser *Kormoran* and the light cruiser HMAS *Sydney*; it was the only encounter of its sort in two world wars in which the conventional warship was sunk by its hybrid opponent. Others, like David Brown's analysis of World War II cruisers, are didactic in nature, revealing the lessons of that conflict in terms of ship design. Following the Washington Naval Arms Limitation Conference of 1921-1922 naval architects found themselves subject to severe constraints when it came to designing the so-called Treaty Cruisers. These were not supposed to exceed 10,000 tons. Conventional wisdom argued in favour of a minimum of eight 8-inch guns and a speed of between 32 and 35 knots. Once these requirements were factored in and the designers made allowance for anti-aircraft armament (and possibly for shipboard aircraft) there was relatively little weight left over for protective armour. When HMS *Kent* entered service in 1928 she had a ten per cent armour weight to standard displacement ratio. Eleven years later, that ratio had risen to 17.5% with HMS *Belfast*. Brown's question is, did the additional armour make any sense? His conclusion; it didn't. "It does not seem unfair to conclude," he writes, "that belt armour [on WW II cruisers] was almost useless (p. 127)."

Tucked away in these articles are those little bits of naval trivia which make volumes like this a pleasure to browse through. When the Japanese started to build the Tsukuba and Kurama classes of "proto-battlecruiser" (a 12-inch gun series contemporary with HMS *Dreadnought*) they discovered that vessels of this type required as many as 1,300,000 rivets. Because pneumatic hammers were not in use in 1905, the Japanese had to embark on a full-scale recruitment and education programme to train hand riveters. Rivetting also featured in the Treaty Cruiser programme when ship-builders managed to pare forty tons off displacement weights by using rivets with smaller heads!

The twelve articles in this volume are

supplemented by a Review Section which contains Warship Notes, Naval Books of the Year and a useful summary of naval developments during 1992. The last-mentioned section contains more intriguing footnotes; for example, HMS *Manchester* employed six budgerigars as a chemical protection system during the Gulf War and in 1955 the ex-Italian battleship *Novorossiysk* detonated a World War II German mine and because the damage control system was so inadequate the five hundred men who survived the blast lost their lives when the vessel capsized.

This is a very useful and entertaining compendium, relatively error-free and richly illustrated. It provides the wealth of technical detail which enables those working on a grander scale to demolish old myths and buttress new arguments.

James A. Boutillier
Victoria, British Columbia

David Loades. *The Tudor Navy: An Administrative, Political and Military History*. Aldershot, Hants. & Brookfield, VT: Scolar Press, 1992. x + 317 pp., maps, glossary, bibliography. US \$69.95, cloth; ISBN 0-85967-922-5.

In 1485 there was no administrative structure supporting the regular navy in England. David Loades likens the Royal Navy at that time to an occasional event which accompanied open and formal dynastic conflict. When the conflicts disappeared, so too did the Royal Navy. Slowly and steadily, this changed. Even as early as 1520 it may be said that England had a standing navy. Indeed, the periods of heightened dynastic conflict (and they were many, e. g., 1483-85, 1512-14, 1522-24, 1543-47, 1585-92) are especially important, for each led to the construction of new ships, significant improvement in the design and mounting of artillery, and the growth of facilities to build and outfit ships. But the process was cumulative and, as the century wore on, the peaceful lulls between wars were increasingly occupied with ongoing naval

administration. More docks were constructed and fortified, and solid and permanent storehouses were built to hold stocks of rope and canvas and to receive tackle of laid-up ships. The development of line management, well before mid-century, reflected the identification of specialized functions and the employment of appropriate personnel: for ordnance, for the purchase and provision of supplies of ironware, canvas, tar, pitch, spars and masts, for victualling, which presented special problems related to perishability, for finance and financial control, for ship leasing, for the hiring and management of shipkeepers, carpenters, smiths, gunners, and so on.

For the history of the overall development of naval administration, including the chapter on the medieval background, Loades relies on several established sources: Oppenheim, Laird Clowes, and Rose. He also makes extensive use of archival sources which considerably enrich his study by the introduction of graphic material on the costs of ship repairs, maintenance both at sea and while laid up, costs of ordnance, crew, and supplies.

Overall the account is chronological and often, though not uniformly, dry. At several points, Loades weaves the story of administrative developments into the political and diplomatic history of the times with which he is very familiar. For example, the chapter on the Armada is very good reading: it gives a fresh and very sympathetic account of the achievement of the Duke of Medina Sidonia in assuming the nearly impossible task of assembling a massive Spanish fleet and taking it in stately and basically undamaged condition to the Calais roads; it also makes evident that the English victory over the Armada was built upon the solid infrastructure of ports, suppliers, and administrators which the Tudors had built up in the course of a century. At other times, and this applies to nearly all chapters, the account is enlivened by rich, intriguing, and suggestive material detail. The size and cost of cable, rope, canvas, deadshares, dried beef and sea biscuits; the logistics and costs of victualling four hundred

soldiers and two hundred seamen for two months at sea; the first systematic use of gun ports and the line ahead formation in battle; the cost and storage space required for a fully armed ship of war with bills, pikes, bows, shot culverin, demi-culverin, falcon. Both for this enriching detail and its overall thesis of slow and steady development, Loades' study is well worth reading.

In terms of limits (not to be read as weaknesses or faults), the book integrates naval history into the political and military history of the times. Loades readily acknowledges that the growth of trade was a fundamental factor behind England's growing naval strength, but trade is not a theme he explores in detail or systematically. Also, this is history of maritime development in the narrow seas. The adventures of Hawkins and Drake in the Americas, the great looming potential of the North Atlantic, are only alluded to or touched on briefly. The overwhelming emphasis is on development in the coastal ports and the narrow seas around England. But this emphasis itself is suggestive that England's naval strength by the end of the century derived from the development of a relatively narrow but intensively focused naval administration.

David McGinnis
Calgary, Alberta

Robert Gardiner (gen. ed.); Andrew D. Lambert (consulting ed.). *Conway's History of the Ship. Steam, Steel & Shellfire: The Steam Warship 1815-1905*. London: Conway Maritime Press, 1992. 192 pp., photographs, tables, figures, bibliography, glossary, index. £28, cloth; ISBN 0-85177-564-0.

This is the fourth volume to be published in Conway's "History of the Ship" series. Not for the novice, it is a useful collection of articles that treats the transition from sail to steam as a whole, rather than looking at one small part in isolation. The chapter titles (and authors) are: "The Introduction of Steam" (Andrew Lambert); "The Screw Propeller Warship"

(Lambert); "Iron Hulls and Armour Plate" (Lambert); "American Civil War" (William N. Still); "The Era of Uncertainty 1863-1878" (David K. Brown); "Warships of Steel 1879-1889" (John Roberts); "The Pre-Dreadnought Age 1890-1905" (Roberts); "Underwater Warfare and the Torpedo Boats" (David Lyon); "Early Submarines" (Michael Wilson); "Naval Armaments and Armour" (John Campbell), and "Warship Machinery" (Denis Griffiths). Each chapter is richly supplemented with photographs, line illustrations where useful, and a comparative table of the principal ships discussed.

The intent of the series "is not to inform genuine experts in their particular area of expertise, but to provide them with the best available single-volume summaries of less familiar fields." (p. 6) This book certainly does that. Lambert has been careful to include strategic and political considerations alongside technical concerns in his chapters. Brown, a naval constructor, includes in his most readable and interesting chapter, a brief and very helpful discussion of the theory of stability and the discovery of its principles, in relation to his period and the issue of the loss of HMS *Captain*. As the book is meant to be starting point for anyone doing work in any of the subjects covered, the annotated bibliography, prepared by the series editor, Robert Gardiner, assumes special importance. It provides a very good collection of the major works, some of them obscure and hard to find, which ought to be consulted in further study. Lambert and Still provide extensive footnotes which indicate additional sources.

Unfortunately, the quality of writing is uneven. That, as much as the intent to provide a book for those interested in and knowledgeable about the sea, will preclude its having a general reading appeal. Campbell's chapter on armaments suffers most from obscure and technical writing and is disappointing as it omits the important question of gunnery control. There is no mention in the chapter, nor in the bibliography, of the issues for which Admiral Sir Percy Scott and Admiral

William Sims crusaded in their respective navies. Yet they began their campaigns for improvement of fire control well within the period defined by the book, and it remained an unresolved problem, at least for the RN, at the outbreak of World War I. If the chapter on submarines can be given more space than that on the development of machinery, although submarines were peripheral up to 1905, it would appear difficult to justify the oversight of gunnery control.

The emphasis throughout the book is on British developments. Britain led during the nineteenth century and therefore this focus is not misplaced. However, it does not prevent the writers from looking at developments in other countries, and noting their progress in relation to Britain. *Steam, Steel & Shellfire* is an attractive, large format book that has been produced to a high standard. The price, modest by current English practice, should not deter anyone with an interest in this period or subject. Many of the secondary sources are now long out of print, and this work does offer an accessible, modern treatment of its subject. It should be a required reading for anyone teaching a course in naval history or technology of the nineteenth century.

William Glover
Ottawa, Ontario

Anthony J. Watts. *The Imperial Russian Navy*. London: Arms & Armour Press, 1990. 192 pp., photographs, figures, tables, appendices, index. US \$29.95 (\$39.95 in Canada), cloth; ISBN 0-85368-912-1. Distributed in the United States by Sterling Publishing Company, New York, NY.

The Imperial Russian Navy is a reference work which catalogues Russian warships from the middle of the nineteenth century through World War I. With numerous similar volumes published by Janes and other naval presses to his credit, including *The Imperial Japanese Navy*, Anthony Watts has produced a useful and familiar reference work.

Watts divides the ships into nine categories: capital ships, cruisers, coast defence ships, gunboats, destroyers, torpedo-boats, submarines, mine warfare ships, seaplane carriers, and miscellaneous warships. He does a nice job of breaking the various groups into classes and in describing the purpose for transitions in construction and design, frequently detailing the operational history and record of service of individual ships and classes. The work is replete with tables describing the physical characteristics, propulsion systems, armament, protection, and complement of ships and classes. It also identifies builders and yards in Russia and abroad. The sections are embellished with 172 photographs, a remarkable collection, which adds explanation and meaning to the work. Researchers will greatly appreciate the index for this volume. It has been very skilfully and carefully prepared to give maximum access to a very large amount of information.

Watts has relied heavily upon the published work of S. P. Moiseev, *Spisok korablei russkogo parovogo i bronenosnogo flota, 1861-1917 (A List of the Warships of the Russian Steam and Ironclad Fleet from 1861-1917)* and upon the unpublished materials of Boris Drashpil housed in the US Naval Historical Center. Watts' work will be very useful to historians interested in the transfer of military technology and in the changes wrought in ship construction, design, and armament in the last half of the nineteenth century and the first decades of the twentieth.

Unfortunately the title, *The Imperial Russian Navy*, is misleading, for the book covers only a small portion of the Empire and describes the fleet rather than the navy. Readers with an interest in the age of sail will be disappointed when they open this volume. Though Russia was proclaimed an empire by Peter I in the early eighteenth century, Watts begins with the age of iron and steam at the mid-nineteenth. Nor is it a history of the navy; rather, it is a description of the construction and composition of the fleet. Those interested in such issues as manning, adminis-

tration, and operations will be disappointed as well, but they will certainly find it a useful resource. Persons with either interest will find the introductory chapter, which surveys the history of the navy from its inception to World War I, derivative and dated in its treatment of the age of sail. Indeed, it appears to be drawn largely from Fred Jane's dated and dubious "classic," *The Imperial Russian Navy*. But Watts is interesting and original for the period covered by his book, obviously a result of his own tour through the materials. Particularly interesting are the segments on the rebuilding of the fleet after Tsushima, the naval mutiny of 1905, and those on the fleet and operations during World War I.

Richard H. Warner
Fredericksburg, Virginia

John Roberts. *The Anatomy of the Ship: The Battleship Dreadnought*. London: Conway Maritime Press, 1992. 256 pp., photographs, figures, tables, sources. £25, cloth; ISBN 0-85177-600-0.

Most readers of maritime topics are aware of "The Anatomy of the Ship" series of books which appeal particularly to the technically minded reader. In this latest offering, John Roberts brings the series to a new height by his exacting research, excellent photographs and superb drawings. *The Battleship Dreadnought* is an account of what is arguably the most influential ship in history. With the advent of HMS *Dreadnought* every capital ship in the world, including those of Great Britain, were rendered obsolete. Her appearance triggered the acceleration of the naval race between Germany and Great Britain which contributed, in no small part, to the commencement of World War I.

The widely accepted theories of Cuniberti of Italy, the perfection of the torpedo, which necessitated an increase of gunnery ranges, plus the new capabilities of spotting and fire control all dictated a new concept of battleship construction and deployment. Under the

chairmanship of Sir John Fisher, the First Sea Lord, the Design Committee of the Director of Naval Construction rushed through the design criteria and secured project approval in March 1905 after less than six months of deliberation. Keel laying commenced on October 2, 1905 and fourteen months later, she completed her acceptance trials. *Dreadnought* was commissioned in January 1907, a tribute to the logistics planning and high efficiency of the Portsmouth Dockyard of that period. With a length of 526'-0" on an 8,500 ton displacement, a turbine drive giving a twenty-one knot speed and consistent main armament of ten 12" guns, she was the most formidable and innovative ship afloat. Though Japan and the United States were planning all big gun capital ships, Great Britain scored a technological coup and put herself well in advance of all other countries in naval construction technology. After an experimental cruise of 11,000 miles, *Dreadnought* had very few deficiencies—remarkable for a ship which incorporated new and untried ideas in every system and component. So successful was her planning, that the six following battleships differed only slightly from her basic design.

Despite this auspicious debut, *Dreadnought* achieved little of note in her peace and wartime careers. In ramming U-29, she became the only battleship in history to have sunk a submarine, but other than that, little. At the end of the war she was put into reserve and sold for break-up in 1920. The ship that had cost £1,786,630 in 1906 fetched only £44,750 in 1920!

Roberts begins with a very detailed description of the design, construction, innovations, technologies and service life of the vessel. Here a table of abbreviations and definitions would have helped the understanding of the casual reader. Then follow twenty-eight pages of clear photographs of the ship under construction and in service. Oddly, the construction progress photos stop before her launching, leaving us to wonder as to her changing appearance up to completion. But it is the drawings that are the glory of the

publication—187 pages of some of the finest ship drafting that this reviewer has ever seen. They are produced to standard architectural scales, making enlargement for the modeller very easy, unlike the previous "Anatomy" books, where odd scales are utilized to fit the details into the standard page format.

Minor omissions are to be expected in a technical work of this magnitude and complexity. I found a half a dozen of these, but regard them as insufficiently serious to catalogue. On the dustjacket Ross Watton, another "Anatomy" contributor, has executed a very good rendition in oils of the ship at sea. However, the back dust jacket with its colour guide profile is less successful; the colours are not true and are likely to be less so as the cover fades. Reference in the text to Humbrol or other established modelling paints would have been more useful and accurate to the artist and modeller.

For the casual reader or "Anatomy" series collector, the book may be too expensive; after all, it is nearly twice as costly as any previous book in the series. Yet it is also nearly twice as long, and in terms of the time, effort and love displayed in its publication, it is a fair price. I am delighted to have it on my shelf, where it will provide continuous inspiration to my own endeavours in the creation of naval ship plans. Congratulations to Mr. Roberts for a superb contribution to marine history and technology!

D. B. Munro
Ottawa, Ontario

Norman Friedman (intro). *German Warships of World War I: The Royal Navy's Official Guide to the Capital Ships, Cruisers, Destroyers, Submarines and Small Craft, 1914-1918*. Annapolis, MD: Naval Institute Press, 1992. 416 pp., photographs, figures, tables, appendix, vessel index. US \$57.95, cloth; ISBN 1-55750-303-6.

This book is a delight—not only for browsing but, once one has become familiar with its

contents, as a helpful tool for studying the German naval technology of World War I. As Norman Friedman's brief but illuminating Introduction explains, the volume draws upon a series of secret "Confidential Books" compiled by the Royal Navy's intelligence branch and regularly updated throughout the war. The Books forming the present volume reflect the status as of the period July to October 1918. Thus the modern reader will gain insight not only into what the Royal Navy was convinced it knew about German warships and ship-building at the time, but also, when seen against the background of subsequent studies and publications on World War I, into the precision of the Royal Navy assessment. While much has been made of the impact of radio intelligence and decryption on naval operations of this period, Friedman's compilation reveals just how solidly the Royal Navy had penetrated German dockyards and bases.

The book is divided into six major sections: 1) general information on gear, machinery, boats, trials and underwater protection; 2) Battleships and Battle-Cruisers; 3) Cruisers and Light Cruisers; 4) Destroyers and Torpedo Boats; 5) Submarines; 6) Miscellaneous Vessels. It provides a wealth of substantive detail covering everything from ship statistics to production costs, hull fittings, furnishings, gunnery, propulsion systems, and (in the case of submarines) tactics. It also includes the kind of arcane information which, once all the bits are put together, help develop a threat assessment. Thus, for example, we learn that Germany's first Battle Cruiser and first large turbine ship *Von der Tann* would not usually fire its forward turret at night due to the effect on bridge personnel of flash and blast; that gas masks were just being supplied to the fleet at the time of the Battle of Jutland (31 May, 1916) and by October 1918 were in sufficient quantity for issue to all personnel; that the Royal Navy found no evidence of German destroyers or torpedo boats being fitted with hydrophones (though elsewhere we note that 'submarine signalling apparatus' had been fitted in battleships); that where British

submarines emitted tell-tale smoke when starting combustion engines on the surface, the German U-boats generally did not. Those inclined to defend the small Canadian HMCS *Hochelaga* for skedaddling home when faced with the ominous presence of the U-cruiser U-156 in August 1918 will find some support in the Royal Navy's intelligence assessment that the submarine's guns could send a 100-lb. projectile 15,000 yards. And on a domestic issue, one might enjoy the whimsical fact that bandmasters who did not have a cabin in Dreadnoughts were housed with the carpenter.

The original Confidential Books which comprise this volume appeared in fascicles and were intended to be studied by serving naval officers. The compilers would doubtless have expected the officers to read sequentially. To rum these now into the "reference work" which the Introduction of this volume promises requires a proper index. But here Norman Friedman (or his publisher) has spoiled the ship for a ha'penny's worth of tar, for he only provides an undifferentiated "Index to Vessels." Given the abundance of fascinating information the volume contains, this unfortunate lapse limits the book's utility. It would have been helpful to have provided at least a selected index covering such items as antisubmarine explosive kite, hydrophones, Isherwood (longitudinal construction), Parsons turbines, range-finders, submarine signalling apparatus, and wireless telegraphy. Such an index would have gone a long way in highlighting the unity and diversity of World War I naval technology.

Michael L. Hadley
Victoria, British Columbia

Edwyn Gray. *Hitler's Battleships*. Annapolis, MD: Naval Institute Press, 1992. ii + 195 pp., photographs, appendix, bibliography, index. US \$24.95, cloth; ISBN 1-55750-363-X.

As its succinct title suggests, the subject of this well-known popular naval writer's latest work is the Kriegsmarine's ill-fated battle-

fleet. Its contents are divided among a brief un-paginated author's note, prologue, and nine chapters. The latter are rather loosely organized chronologically and thematically. As is his hallmark, the text is a delight to read. Gray's one main fear, according to his prologue, is that most readers would disagree with his decision to include Germany's three *panzerschiffe* in this work. However, despite the Kriegsmarine's prudent 1940 decision to reclassify the two surviving vessels of this type as heavy cruisers, one must concur with his judgement.

In fact, this should be a trivial concern compared to the other shortcomings which are present in this work. Gray has simply failed to provide us with any detailed technical data on the Kriegsmarine's battleships. His technical descriptions of the ships built and planned are far too brief to be of use to the reader. This deficiency is not remedied by his lone appendix, which suffers from both poor presentation and a few factual errors. For example, the *Graf Spee* never carried 88 mm A/A guns. Battle history buffs will be disappointed by the complete lack of maps. However, its twenty photographs are reasonably well-balanced between personalities and ships.

The drawbacks of this volume are not limited to its poor presentation of technical matters. Gray never gives the precise date for the reclassification of the *Scheer* and *Lutzow* as heavy cruisers, and while he may be correct in stating that this effectively removed them from Hitler's "no-risk" policy, he does not introduce any evidence to support his theory that Raeder did so in order to circumvent the German warlord's restrictions. In fact, this is probably the sole thesis presented in this volume which one can pick out as being even somewhat original. Its only other bright light is that he has accurately summarized the leadership paralysis which curtailed the useful employment of these ships.

Also, Gray has made several comments in his text which are faulty. Churchill was far more concerned by Germany's U-boats than her surface fleet. In addition, none of the

RAF's specialty bombs, especially the dam-buster or the "Tallboy," were specifically designed for use against Hitler's big ships. A quick glance at his bizarrely organized bibliography is sufficient to convince us that Gray's sole purpose was to provide a popular account of the history of these ships. It is bereft of references to standard warship encyclopedias, and there is no mention of such recent key works like Ballard's *Discovery of the Bismarck*, to give one example.

To sum up, this work is somewhat disappointing, and would best serve as a primer to introduce novice readers to this topic. Readers who are craving a definitive account of Hitler's battlewagons will be disappointed with this effort.

Peter K. H. Mispelkamp
Pointe Claire, Québec

Shizuo Fukui (comp.). *Japanese Naval Vessels At the End of World War II*. Japan: Office of Naval Intelligence, 1947; Annapolis, MD: Naval Institute Press, 1991. xix + 172 pp., figures, photographs. Cdn \$57.95, US \$42.95, cloth; ISBN 1-55750-274-9. Canadian distributor, Vanwell Publishing, St. Catharines, Ontario.

At the end of World War II, the US Office of Naval Intelligence began an attempt to document the remnants of the once mighty Imperial Japanese Navy. Allied bombing had destroyed most of the official records, and with the refusal of most members of the Japanese Navy to assist in the compilation, the ONI was fortunate that Lt. Cmdr. Fukui, a former constructor in the UN, agreed to write up the report.

Fukui's research records all the major combatant ships, major support vessels, representative minor miscellaneous vessels, special small attack craft, and some Army combatant vessels that existed at the end of the war. With little official data available, the author had to sift through his own archives of documents and photographs, as well as private

records and memoirs of some UN officials. The compilation is meticulous, with each class of vessel carefully drawn to scale and all specifications included. The drawings and all pertinent information are set down on a card roughly 5" x 5", with two card reproductions per page. But in order to keep the drawings within the available space, the scales vary, so size comparisons among different vessels are impossible.

Not only does Fukui provide detailed specifications, he also narrates the wartime history of the vessel and its sister ships. In many cases war losses are included, as well as the final location of the ships, whether bombed-out or sunk. All these notes are hand-printed in very good English, with very few grammatical errors.

The most striking point of the text is the contrast between the power of the Imperial Japanese Navy at the war's beginning and the pitiful state of the UN at its end. In 1941 and shortly thereafter, Japan's navy was one of the world's most powerful. Its main fleet consisted of twelve heavily armed battleships, twenty-six cruisers, twelve aircraft carriers with a superb fleet of fighter planes, many destroyers, which led the world in design and firepower, and of course substantial support vessels. The world's finest torpedo, the "Long Lance," was carried aboard its submarines. In spite of wartime additions to the fleet, by September 1945 the principal world-wide Japanese forces consisted of six carriers, all damaged, four battleships, all damaged, eleven cruisers, with six damaged, forty-two destroyers, with twelve damaged, fifty-eight submarines, of which four were damaged. The relentless bombing and aggressive submarine attacks by the US forces, which left few ships afloat and caused drastic shortages of fuel oil, had left the Imperial Navy impotent. The photographic addendum compiled by Mr. Beilstein (this was not part of the author's original book) gives a clear picture of the damage the vessels sustained.

A close perusal of Fukui's labour shows how desperate the UN had become. Some

transports, minesweepers, and cargo vessels were coal burners. Some freighters had been built of wood and even concrete. The author's precise work is highly recommended as the basic source for all historians concerned with the Japanese Navy and its ultimate demise.

Moreton J. Ensor
Brewster, Massachusetts

Edward Smithies, with Colin John Bruce. *War at Sea 1939-45*. London: Constable, 1992. xi + 206 pp., photographs. £14.95, cloth; ISBN 0-09-471590-4.

This book adds to the somewhat sparse history of World War II as seen primarily from the Lower Deck, or at least by ranks no higher than Sub Lieutenants and Lieutenants. It may not be great academic history, and sometimes is not entirely accurate. But it is the war as seen by eleven protagonists. Tied together by an introduction and bridging notes by the authors (Smithies died before the book was completed), it consists of brief recorded verbatim memories of participants, sent to him in response to requests or recorded during interviews. It is a companion piece to Smithies' *War In The Air* (Constable, 1990), written in the same fashion. There are chapters on the Regulars, the Merchant Service, Dockyard Hands, Wavy Navy (the Reserves), Hostilities Only, Soldierly At Sea (the Royal Artillery manned many anti-aircraft guns in ships around the UK), Fleet Air Arm, Submariners, Bootnecks (Marines! !), WRNS, and Survivors. Each section is represented by five to ten correspondents, their stories running from a paragraph or two to several pages, with scene-setting for each portion by Smithies.

Some tales, of course, are pedestrian, as were the lives of many seamen, often beginning with their entry into "The Andrew" and the shocks of their training bases. Others tell of harrowing torpedoings or of air attacks on poorly equipped ships in the Channel. There are stories of life in huge liners, cruisers, destroyers, MTBs, submarines, small armed

trawlers, merchantmen, the lot. The locales range from home bases in the UK to Burma, from pre-war Hong Kong to Port Said at the end. Some tell of the animosity of the "Regulars" to the Reserves and the HO's-seamen and officers in for the Hostilities Only. Some tell of the heroism of the human spirit in unfamiliar adversity, or of men miss-matched to jobs. A couple are critical of the initial ineptitude of the Americans in early 1942, as seen by the experienced RN after more than two solid years of front-line war, told elsewhere and more officially, but this time by those that were on the scene at a junior level.

In all, this is an interesting and rather valuable series of first person tales, filling in gaps, adding colour to the wide-ranging histories. It is also a good read for those casually interested in the war at sea, and for the *aficionado* of naval history, if not for the purist. And it was nice to see some tales of the Royal Marines, the dockyard maties, the seamen of the Merchant Navy and the Wrens in a naval history for a change. But for them, the war would have been longer and harder.

One of the nicest things about the book is its dust jacket, which includes a most evocative oil painting, "Survivors" by John Hamilton. This depicts a care-worn Hunt-Class destroyer (HMS *Ledbury*), stern on, ensign flying, with heaving lines out into a dirty, oily sea under lowering, dark, smoke-filled skies, rescuing survivors while oil and debris burns in the background. It tells the whole horrific story in one picture of the worst of the war, yet is a wonderful painting.

Fraser M. McKee
Markdale, Ontario

Harold Squires. *S.S. Eagle: The Secret Mission 1944-45*. St. John's, NF: Jespersion Press, 1992. xii + 113 pp., maps, photographs, crewlist. \$11.95, paper; ISBN 0-921692-37-4.

In 1943, while World War II was still in progress, the British government decided it was of vital importance to re-establish sover-

eignty over the Falkland Island Dependencies. To secure such sovereignty and to protect British interests, particularly the large mineral deposits in this area, colonization was deemed necessary. The first attempt to establish bases in late 1943 was not successful because the two vessels chartered locally in the Falkland Islands for this purpose could not penetrate the ice fields and had to turn back. The Admiralty decided to try again the next season, utilizing a ship able to operate in pack ice. In Newfoundland they found the one remaining available ship which could do the job—the SS *Eagle* of 677 grt, the last of Newfoundland's wooden sealing vessels.

Eagle had been built in 1902 and owned by Bowring Brothers Ltd. of St. John's. This small book, comprising ninety pages of text, is the story of how the *Eagle* was chartered by the Admiralty and the subsequent voyage to the Antarctic, from her departure from St. John's on 29 October, 1944 until her return almost eleven months later.

The book is a very personalized account by the author, who served as Wireless Officer and Purser on the trip, detailing the experiences and hardships of the twenty-eight man crew on the journey. As the author says, "This is an epic story of a wooden ship and iron men." As such, it is a most interesting book, covering a facet of World War II maritime history of which almost nothing has been written until now.

John K. Burgess
Calgary, Alberta

S. C. Heal. *Conceived in War, Born in Peace: Canada's Deep Sea Merchant Marine*. Vancouver: Cordillera Publishing Company, 1992. 234 pp., appendices, index. \$19.95, paper; ISBN 1-895590-01-9.

This is a detailed and thoroughly researched history of Canada's deep-sea merchant marine. It is dedicated to preserving Canada's maritime heritage and covers two world wars. The author is a retired naval officer who

makes his home on Canada's west coast. Born in England, he spent his active working life closely connected with the sea, from foreign-going to coastal shipping, as well as off-shore supply and marine insurance. His clear and knowledgeable book is a detailed study and one of the few Canadian books that covers the complete history of Canada's merchant marine building programmes of the period.

Heal takes the reader through a series of events beginning with Canada's World War I merchant shipbuilding programme, together with the disposal of these ships. This led to the formation of the Canadian government merchant marine (CGMM), which functioned during the 1920s until the mid-1930s. One chapter deals with the overloading and under-fuelling of merchant ships and relates to the interesting subject of the principles of "general average" marine insurance and maritime law. For those who went to sea during and after World War II and who are generally interested in a later era of Canadian-registered merchant ships, Heal has devoted a chapter to the merchant shipbuilding programme of World War II, which describes the ten thousand tonners, known as the "Forts" and "Parks," as well as the forty-seven hundred ton Scandinavian-designed freighters that were built in Canada's east coast yards, together with thirty-six hundred ton tankers. A brief history of the various shipbuilding yards that so generously participated in Canada's World War II programme is also included, as are the ships' names and the number of ships built in each yard. Another chapter focuses on the "fleet train"—the ships that functioned as floating mobile supply and repair facilities, performing the process of refurbishing on location. Two chapters examine the brief post-war period of prosperity of Canada's World War II-built merchant ships, as well as the companies that operated these ships, reflecting well-known vessels in which we served and the memorable companies that employed us.

The book also lists alphabetically the name of every deep-sea merchant ship built in Canada during both programmes, together

with war and marine-related losses. It concludes with a list of Canadian maritime museums and ship research organizations. Overall, it reflects a high standard of writing. This is a valuable and informative history of Canada's deep-sea merchant navy in two world wars, enhanced by over a hundred and sixty supporting black and white pictures; it should be considered as a required reference in libraries, universities and museums and should have wide appeal to serious students of Canadian commercial marine history.

R. F. Latimer
Dartmouth, Nova Scotia

Stephen Howarth (ed.). *Men of War: Great Naval Leaders of World War II*. London: Weidenfeld & Nicolson, 1992. xxi + 602 pp., maps, illustrations, index. £30, cloth; ISBN 0-297-81093-6.

Over the past few years, the firm of Weidenfeld and Nicolson has produced collections of biographical articles about World War II military leaders written by specialists and edited by eminent historians. First came Correlli Barnett's *Hitler's Generals*, then John Keegan's *Churchill's Generals*. Now, naval leaders from the 1939-1945 conflict receive similar treatment in Stephen Howarth's *Men of War*. The book is more expansive and innovative than the army volumes. Rather than concentrating on officers from just one country, *Men of War* covers men from the British, German, Japanese and United States navies. And while the army volumes do not dip beneath the rank of general, Howarth has several officers below flag rank. Moreover, he has not just selected personnel from the "sharp end" but includes some from valuable support trades.

Men of War analyzes the role of thirty-nine officers, arranging them thematically rather than by country as might be expected. First come the high commanders, like Nimitz and Dönitz, followed by the air admirals (Mitscher and Nagumo), amphibious admirals (Ramsay and Turner), submariners (Prien and

Lockwood), a section entitled "Anti-submariners, Tactical and General" (Walker and Somerville), and, finally, some "Unsung Heroes" such as intelligence officers and engineers. Most that you expect to find are there, but there are some, like Arleigh Burke and the US Marine "Howlin' Mad" Smith, who might be considered surprises, albeit pleasant ones.

Part of the fun of reviewing a book like this is to suggest who *should* be there. There should be an Italian, and Angelo Iachino, who fought Cunningham at Matapan and Vian at Sirte, seems an obvious choice. Also, while the U-boat commanders Kretschmer and Prien are deservedly present, the only USN submariner is Admiral Lockwood, and the account of his role is far from satisfactory. Given the decisive role that "pig boats" played in the defeat of Japan, American skippers like Fluckey or O'Kane deserve to be included. Furthermore, a Dickens or Hichens from MTBs would not be out of place, nor would Tanaka, the great Japanese destroyer leader.

With so many contributors—twenty-six in all—it is not surprising that there is a wide range of approaches, styles and quality of research. Only the latter presents any real problem as some historians produce standard accounts based solely upon existing, and sometimes dated, secondary sources. More frustrating is that many contributors did not include footnotes.

There is not space to discuss all the articles but let's look at a few. The late Peter Kemp opens with a personal account of the controversial Dudley Pound. Kemp worked in the Operational Intelligence Centre and occasionally had direct contact with Pound, or was privy to scuttlebutt about him. None of the controversies that swirl around Pound are resolved but Kemp presents a wonderful character study that describes well the heavy strains placed upon the British naval leader. In an outstanding piece on Erich Raeder, Keith Bird refutes the argument that Hitler was responsible for Germany's naval failure. Instead, he blames Raeder's fixation with long term fleet programmes and his technological

backwardness. Of interest to Canadians, W. S. Gardner stokes the fires of Dieppe by introducing a letter written by Bertram Ramsay, the British expert in combined operations, in which he attributed the disaster to the fact that it was planned by "inexperienced enthusiasts," and explained that the raid's supposed lessons were already well-known.

Two aspects of *Men of War* make it akin to a mini-historical conference that we can enjoy from the comfort of a favourite easy chair. Several articles, especially those on Americans, are at odds with each other. An example is the dispute over the San Bernardino Strait incident during the Battle of Leyte Gulf. Robert Love says that Ernest King, defending Halsey, criticized Kinkaid for not ordering a dawn reconnaissance; Gerald Wheeler maintains that he did. At first blush such disagreement seems a weakness, yet it actually draws us into interesting debates. Both men achieved legendary status as destroyer officers but Burke appears to have displayed more tactical flair and certainly made better use of technology. Both would later be transferred to carrier operations and, while Vian is often held up as an example of how surface officers make poor air commanders, Alan Rosenburg demonstrates, through Burke, that a dedicated "skimmer" could do the job. Despite some unevenness, the fact that *Men of War* sparks such comparison and discussion—plus the fact that it is simply a good read—makes it a worthwhile purchase.

Michael Whitby
Almonte, Ontario

Robert A. Winston. *Fighting Squadron: A Sequel to Dive Bomber*. Annapolis, MD: Naval Institute Press, 1991. 182 pp., photographs. Cdn \$24.50, US \$17.95, cloth; ISBN 1-55750-902-6. Canadian distributor, Vanwell Publishing, St. Catharines, Ont.

Fighting Squadron is a facsimile reproduction of a well-known account of US naval aviation in the Pacific during the latter years of World

War II. It was written during the author's shorebound tour on the staff of Admiral Nimitz at the very end of the war and published in 1946. It is the last of three books recounting Winston's active aviation career from 1935 to 1945. The first, *Dive Bomber*, gave a fascinating glimpse into the pre-war USN; it detailed his basic training and squadron experience on the USS *Lexington* and USS *Enterprise*. Published in 1939, it has also been re-released by the Naval Institute Press. *Aces Wild*, Winston's second and very unusual account of ferrying Brewster Buffalos to Finland during the Winter War, is only available in its original 1941 edition. *Fighting Squadron* completes the story.

The book is eminently readable. In fact, anyone with any more than a passing interest will likely get through it in one sitting. Winston's earlier work as a journalist shows through in the first person nature of the account, complete with reconstructed conversations and character sketches. Yet this is not a syrupy or over-romanticised rendition which wartime journalism often can be. The book reflects the uncertainties, frustration, fear and violence of carrier flying in an active theatre in a candid, understated way.

After more than a year in Washington, Winston talked himself back into active flying in early 1943 and in May, at the ancient age of 37 was given command of a newly formed fighter squadron assigned to the USS *Cabot*, an *Independence-class* carrier. Surviving an almost fatal mid-air collision while undergoing refresher training, Winston commanded VF-31 through some of the most well-known actions of Task Force 58 including the attacks on the Marshalls, Truk and Saipan and the "Marianas Turkey Shoot." During his tenure the squadron had no casualties and was credited with an enviable record of success in the air and against surface targets. Winston's active war ended in the late summer of 1944; he spent the remainder of hostilities in staff positions in Washington and the Pacific. His book gives a very contemporary sense of what it was like to have been involved in these

significant actions "on the sharp end."

In re-releasing this book, the Naval Institute Press has done justice to a classic wartime account. My only criticisms are minor and perhaps not resolvable with a facsimile reproduction. The first relates to the quality of the photographs incorporated into the work and the second concerns the absence of maps. The former are grainy and the lack of the latter is unfortunate. Failing that, *Fighting Squadron* is recommended reading, especially if done in conjunction with Winston's first two books.

Christopher J. Terry
Ottawa, Canada

Theodore Rockwell. *The Rickover Effect: How One Man Made A Difference*. Annapolis, MD: Naval Institute Press, 1992. xviii + 411 pp., photographs, figures, index. Cdn \$33.95, US \$24.95, cloth; ISBN 1-55750-702-3. Canadian distributor, Vanwell Publishing, St. Catharines, Ont.

The author, an American nuclear engineer, claims his book presents a picture (or a series of small snapshots) taken "from the inside" of a man who changed the world in ten years. Vice Admiral Hyman G. Rickover, the father of the nuclear Navy, masterminded that change in the 1950s by sheer force of will and wit, and as a low-level government bureaucrat. Rockwell, who saw the admiral "close up and continuously" at Naval Reactors headquarters in Washington, DC during its first fifteen turbulent years, and less frequently in the subsequent twenty-two years until Rickover's death in 1986, rightly contends that this book is more a memoir than a history. He cautions that the book is not based upon tape recordings or contemporaneous notes but on his recollections of events. He checked his account as far as possible with persons involved. The resultant mosaic is *The Rickover Effect*. Essentially, it is an autobiography of Theodore Rockwell as well as a biography of Hyman Rickover, a factor which

enhances the account's readability.

Rockwell first met Rickover in 1947 during a physics class at Oak Ridge, Tennessee, the home of the atomic bomb. Rockwell found the course tough. So did "one silver-haired guy," a naval officer named Rickover with an electrical engineering background, "who kept asking simple, basic questions, and making himself look pretty stupid." The two of them, with a dozen other classmates, attended tutoring sessions to keep up—doubtless some of the most important tutorials this century. Rickover learned the new science and technology that made control of atomic energy possible and assigned himself the task of building an atomic submarine. Rickover recognized the difference between ideas and accomplishments, between science and engineering, and it was his engineering background that made him singularly effective. He did not invent or discover nuclear power, but he made it a practical reality.

By the 1950s Admiral Rickover attained international recognition as the most influential figure in nuclear power. In 1958 the first atomic submarine *Nautilus* ran submerged from Hawaii to England by way of the North Pole. The *Skate* and her sister ships operated year-round under the polar ice cap in 1959. High speed attack submarines like the *Skipjack* exhibited unprecedented military capabilities. In 1960 the two-reactor submarine *Triton* circled the globe submerged, and the first Polaris missile submarine, *George Washington*, made its debut. Several nuclear powered surface ships had gone to sea by 1962 including the aircraft carrier *Enterprise* and the cruisers *Long Beach* and *Bainbridge*.

More important than military hardware, Rickover and his organization created a vast technological base. By 1957 Rickover had built the world's first civilian nuclear power station, at Shippingport near Pittsburgh, Pennsylvania. New industries sprang up to produce exotic materials previously known only as laboratory novelties. He gave new meaning to industrial quality control and technical training of staff. Ten thousand

officers and sixty thousand enlisted personnel trained in Rickover's programme. Hundreds of thousands of persons in industry felt his personal influence on their lives. Whether one favours or fears nuclear power one can only wonder at the impact this man had on the world of politics, industry, technology, education, professional ethics, environmental protection and natural resource conservation. That is the "Rickover Effect" which Rockwell chronicles in this memoir.

Rickover's detractors, and he had some in high places including Navy Secretary, John Lehman and Defense Secretary, Caspar Weinberger in the Ronald Reagan administration, might depreciate this book as a hagiography by a former Rickover team player, but in the pantheon of American saints, surely Hymen G. Rickover will be commemorated as one man who did make a difference.

David P. Beatty
Sackville, New Brunswick

Barry Gough. *The Falkland Islands/Malvinas: The Contest for Empire in the South Atlantic*. London and Atlantic Highlands, NJ: Athlone Press, 1992. xvi + 212 pp., maps, bibliography, index. US \$65, cloth; ISBN 0-485-11419-4. Distributed in North America by Humanities Press, Atlantic Highlands, NJ.

In 1771, Dr. Samuel Johnson supposed that "the time has now come when Falkland's Islands demand their historian." He was wrong by some 211 years. It took Mrs. Thatcher and General Galtieri to bring "Falkland's Islands" to the notice of the history profession. Books on the sad circumstances surrounding the history of the Falkland Islands are no longer unusual but few have resulted from the careful study of primary documents, especially British ones, as has this slim volume. There is a good chance that Barry Gough is the historian that Dr. Johnson had in mind.

Gough covers the tangled story of the Falkland Islands from their earliest discovery by John Davis in August 1592, through

attempts at colonization by Spain, France and Britain. Especially in the case of Britain, strong naval and commercial pressure was required to interest a reluctant government in the commercial and strategic benefits of the islands. Then, in 1810, Napoleon's conquest of Spain led to the unilateral declaration of independence by Argentina, the self-proclaimed and possibly the rightful heir of Spain. Ten years later, Argentine forces planted a small colony on East Falkland. The Argentine governor, German-born Don Luis Vernet, attempted some overdue resource management in the sealing and whaling industries, arresting a number of American ships in the process. This action did not accord with the American view of Freedom of the Seas and a visit from the US Navy at the end of 1831 resulted in the virtual destruction of the little colony. An Argentine attempt to restore the colony collapsed in mutiny and anarchy.

Into the void created by American gun boat diplomacy stepped the reluctant British who had never abandoned their claim to sovereignty. Slowly a British Colony developed, based economically on sheep, whaling and ship chandlery. The Argentineans, for their part, disputed British claims, made their own claims and treated the matter as a national crusade. It is interesting that the incumbent dictator in 1833 (General Rosas) used the lost Malvinas and Perfidious Albion to the same ends as his successor one hundred years later. By 1982, the lost Malvinas had become a blot on Argentina's considerable national pride.

Gough covers the diplomatic history with a happily informal touch. He is more than careful not to take sides. At the same time, his research into Admiralty, Foreign Office and Colonial Office documents, gives his work an added extra dimension. Readers might wish that Gough could have taken them further into the 1930s, notable for the Anglo-Argentine war by postage stamp, and the 1940s, the time of the super-nationalism of Juan Peron.

It may be a quibble to criticise an excellent book for minor physical blemishes. Yet

Gough has certainly not been well-served by his editor. Your reviewer counted seventeen very obvious typos and errors in a single reading. In a book that will cost Canadian readers in excess of \$90, this is inexcusable. A book of this type also deserves a decent, clear, readable map showing the places mentioned in the text. The map in this volume is also used as a cover decoration. That is about what it is worth.

Finally, it's impossible to read this book without reflecting on where all this diplomacy led~255 young British servicemen and (at least) 712 Argentinean conscripts killed in action, defending their respective nations' view of events one hundred and fifty years or more in the past. In Johnson's words, cited by Gough, "the pride of wit has kept the ages busy in the discussion of useless questions and the pride of power has destroyed armies to gain or keep unprofitable possessions."

David Fry
Toronto, Ontario

Kenneth J. Hstl. *Challenger At Sea: A Ship That Revolutionized Earth Science*. Princeton, NJ: Princeton University Press, 1992. xxxi + 417 pp., maps, figures, photographs, appendices, index. US \$35, cloth; ISBN 0-691-08735-0.

During his career, Kenneth Hsu has published over 250 articles and ten books in the areas of marine geology and geotectonics. In this book, a revised translation of *Ein Schiff revolutioniert die Wissenschaft*, he offers his personal history of the cruises of the *Glomar Challenger* from 1968 to 1983 and describes their importance to the field of earth science. The book is not intended as a scholarly work or as a technical reference, but is, instead, as Hstl states in the introduction (p. xviii), "the story of a participant."

For an earth scientist or a well-informed layman, this is an entertaining and informative, if somewhat chronologically erratic, personal exposition on the crucial importance

of sea floor drilling to the development of the plate tectonics theory. However, readers interested in the everyday life and technical operations of the drillship *Glomar Challenger* will be disappointed as this is marginalized in the text. Hstl makes the case that much of the present paradigm in the earth sciences, i.e., plate tectonic theory, owes its existence to the *Glomar Challenger* and the Deep Sea Drilling Project (DSDP). His book is, in fact, a personal account of the heady days of big bucks for scientific research and is a testimonial to what can be theorized and proven when money is committed to a scientific project. (It is somewhat ironic that this review is being written just as Canada is backing out of a commitment to the funding of the offspring of DSDP, i.e., the Ocean Drilling Project or ODP.) Hstl narrates stories of cruises from the point of view of a scientist, giving attention to what was to be learned from the drilling and the cores retrieved. He understates the technological feats performed and forces the reader to imagine the situation wherein a very large displacement vessel must maintain position very precisely to allow thousands of metres of drill pipe to hang suspended from the ship to the sea floor to drill hundreds of metres into bottom sediment and bedrock.

This book will not easily be read by someone unacquainted with earth science. On the other hand, a reader who perseveres will come out with a fairly respectable general knowledge of the history of the development of plate tectonic theory and its impact on facets of the geological sciences. Hsu's subjects range from continental drift and sea floor spreading to a study of back arc basins, terminal Cretaceous extinctions, sea floor magnetic striping, the Mediterranean sea as a desert and almost every other subject relating to plate tectonics. As well, personal observations and anecdotes about well-known earth scientists, scientific organizations and "science politics" add interesting flavour to the text. It is particularly interesting to have Hsu's descriptions of the many and varied responses of the scientific community to the emergence of

this new paradigm.

Minor criticisms include the selection and quality of the figures and editing oversights. While many of the figures may bring back fond memories of the diagrams found in seminal papers and classroom texts of the sixties and early seventies, they beg more detailed captions for the lay audience. As well, the clarity of some diagrams could be improved. Editing oversights include such obvious errors as "Arctic" for "Antarctic," (p. 230) "Kane" for "Keen" (p. 387) and perhaps it would have been better to refer to "Toronto, Ontario, Canada" than to "Toronto, Canada." (p. 16)

William J. Iams
Corner Brook, Newfoundland

Lin and Larry Pardey. *Cruising in Seraffyn*. Dobbs Ferry, NY: Sheridan House, 1992. 192 pp., photographs, figures, tables, maps, appendices. \$16.95, paper; ISBN 0-924486-36-8. Distributed in Canada by Nimbus Publishing, Halifax, NS.

If you missed *Cruising in Seraffyn* in the 1970s, you now have a second chance to join Lin and Larry Pardey for a sail down the west coast of America, through the Panama Canal and across to England. The story of how the Pardeys started cruising in a twenty-four-foot engine-less cutter makes interesting reading, as well as serving as a fine example of how one goes about adopting a cruising lifestyle. The Pardeys offer several suggestions for those planning to make the change from occasional sail or cruiser. For starters they suggest one begin earlier rather than later in life and select a modest yacht, particularly one you can handle alone in the worst conditions, one you can maintain in less than a month a year, and one you can truly afford. Since they follow the "keep it simple" rule, a boat that meets these requirements for a couple will, more than likely, be under thirty feet. The other advantage of a modest yacht is that you can get going quicker and cruise longer for a given amount of money. Unstated but obvious

from the book is the need for knowledge of your boat, the ability to do all of your own maintenance and skills that can be marketed around the world in order to earn extra cruising cash. The Pardeys, for example, undertook boat repair and rebuilding as well as delivery jobs during the cruise covered in this book. In addition you will discover that they can write very well. These principles seem to have served the authors well over their years of sailing.

The first part of *Seraffyn's* cruise takes in the Sea of Cortez, an area that is rapidly becoming a prime chartering location. The Pardeys seem to have enjoyed their stay there. The description of the people and the sailing will well serve the charter companies currently setting up in that area. They work their way north from La Paz to Santa Rosalia, and we meet a variety of interesting people. Some are passing through, like the Whitcombs with whom the Pardeys take a two-week skindiving cruise. Some are more permanent residents, like the captain of the *Punta Banda* who took the Pardeys shrimping and showed them how others make a living there from the sea.

Twenty months after leaving home they are in the Canal Zone and are ready to move to the more commonly described cruising areas of the Caribbean. As one might expect, taking a small engineless yacht through the Canal could be an adventure. It was. However, with a little luck and lots of competent seamanship, the crossing is accomplished without incident. From there on it is across the Caribbean, up the coast of the United States and across the Atlantic to England.

Cruising in Seraffyn shows that one does not need a mega-yacht to enjoy cruising. A well-designed small boat sailed by a competent crew can result in a very satisfactory cruising lifestyle. Be sure not to miss the *Seraffyn* this time around; I think you will enjoy the cruise.

Roy Hostetter
Corner Brook, Newfoundland

Randel Washburne. *The Coastal Kayaker's Manual: A Complete Guide to Skills, Gear, and Sea Sense*. 2nd ed.; Old Saybrook, CT: Globe Pequot Press, 1989, 1993. iv + 236 pp., photographs, figures, appendix, index. US \$13.95, paper; ISBN 1-56440-153-7.

David Burch. *Fundamentals of Kayak Navigation*. 2nd ed.; Old Saybrook, CT: Globe Pequot Press, 1993. xii + 324 pp., figures, tables, appendix, further reading, index. US \$14.95, paper; ISBN 1-56440-155-3.

Ocean kayaking has many potential hazards. Because they sit low in the water and are "human powered," kayaks are more subject to wind and weather than other ocean-going craft. In addition, since they traditionally carry no navigating equipment, the potential to get lost is very real. While the ocean paddler cannot do much about the weather except to avoid paddling when it is too bad, these two new editions of books by Randel Washburne and David Burch mean that they now have no excuse for being unprepared.

Randel Washburne has a good deal of experience at ocean kayaking, having paddled much of the coast between southeast Alaska and the state of Washington and authored two books on west coast kayaking. This new edition of *The Coastal Kayaker's Manual* lives up to its subtitle, for it contains a vast amount of data on this relatively new sport. The book includes twenty-two chapters dealing with topics ranging from various types of sea kayaks to clothing, manoeuvring, navigation and planning. Washburne also correctly sees safety as the prime concern and develops a model composed of four concentric rings of defence: 1) avoiding trouble; 2) surviving rough seas; 3) capsizing skills; and 4) signalling for help. While the last three are covered sequentially, the latter is treated at the end of the book. His theme might have been developed better had he reversed the order.

Still, the book flows well. Washburne's considerable experience is readily apparent. His writing style is easy to understand and he

manages a relatively straightforward explanation of such difficult topics as the prediction of current speed and time calculations from standard tables. The book definitely belongs on the "must read" list of any ocean paddler since it covers so many topics that other books omit. His treatment of navigation and tides/currents is particularly good. The only drawback is that there are few photos or drawings of the art of paddling. More and larger photos and diagrams illustrating the various skills and techniques, as in David Seidman's *The Essential Sea Kayaker*, would have made the book more useful. Nevertheless it is a very good, all-inclusive volume that should serve a variety of people well.

For a thorough introduction to kayak navigation, the new edition of David Burch's *Fundamentals of Kayak Navigation* is ideal; at \$14.95, it is a judicious investment in how to navigate an ocean kayak safely. Indeed, its title is perhaps too modest: anyone in a small craft, whether powered by paddles, sails or motors, would benefit from its contents.

The book's eleven chapters deal with a wide range of topics, from nautical charts and chart reading to compasses and dead reckoning. He even includes new material on the use of global positioning systems (GPS). While GPS has the potential to make traditional navigation obsolete, Burch wisely advises the sea kayaker not to rely too much on this "high tech" equipment since, if batteries fail or equipment malfunctions, there is no choice but to use "tried and true" techniques. He also includes chapters on the Coast Guard's "rules of the road," marine radios, tides and current and navigation planning. His examples in this last section are particularly useful.

I also liked many of his rules of thumb for calculating everything from geographic range to the size of islands or bays. For Newfoundlanders, his section on fog navigation is particularly useful. The book is very thorough and definitely not bedtime reading.

Keith Nicol
Corner Brook, Newfoundland