BOOK REVIEWS

Fred Calabretta. *Guide to the Oral History Collections at Mystic Seaport Museum*. Mystic, CT: Mystic Seaport Museum, 1992. v + 74 pp., indices. US \$12, paper; ISBN 0-913372-63-3.

During the past several decades a number of institutions, including some museums, have built significant oral history collections. In the case of certain museums, these oral recollections have been employed to good advantage to complement and enhance their artifact holdings. While some historians have found the information contained in tape form useful as primary source material, many oral history recordings remain under-utilized partially due to a scarcity of published catalogues.

Fred Calabretta's Guide to the Oral History Collections at Mystic Seaport Museum seeks to publicize the specialized maritime history recordings housed in the Museum's G.W. Blunt White Library. The guide is subdivided into sections which cover Mystic Seaport's three major oral history collections (general collections, the yachting collection and the Munson Institute lectures). The three sections are further divided into individual recording entries which are complemented by such useful indices as a subject index for the general and the yachting collections. In fact, for those unfamiliar with the oral history resources at Mystic Seaport Museum, these subject indices are among the most helpful tools in the publication.

To be a truly useful tool, a guide or key to a particular collection must follow a few rules. First, and perhaps most importantly, the guide should have a logical organization. Very careful consideration must be given to the categorization of the materials, and indices should be as comprehensive as possible. Clear, concise, descriptive entries to fully identify the materials are essential. Fred Calabretta's guide meets all these criteria.

Actually, one wonders how much longer publications of this type will appear. As personal computers proliferate and printing costs continue to escalate, we can expect guides such as this to be marketed in computer disk form — preferably with random access. Nevertheless, the Mystic guide is an excellent access key to an impressive collection and certainly helps to publicize these holdings to researchers well beyond Connecticut and New England.

Robert S. Elliot Saint John, New Brunswick

Le Roy Barnett (comp.). Shipping Literature of the Great Lakes: A Catalogue of Company Publications, 1852-1990. East Lansing: Michigan State University Press, 1992. ix + 165 pp., figures, tables, bibliography, index. US \$24.95, cloth; ISBN 0-87013-317-9.

In the era of the Internet, of information superhighways, of globally accessible library catalogues, the gentle art of bibliography seems almost passe. But how many of us, whether plugged into the network or not, have not found something useful which otherwise might have gone unread in the "Canadian Maritime Bibliography?" If keeping up with the output of the varied interests of the members of the CNRS seems daunting, pity the poor retrospective bibliographer with aspirations to completeness and authority, and rarely

a second edition to "tie up the loose ends."

Barnett has taken on a particularly difficult class of publication: that produced by shipping companies on the great lakes. From the perspective of the collecting institution much of this is labelled "ephemera:" "sailing schedules, tourist promotional pieces, annual reports and so forth." (p. ix) Barnett has included employee publications like newsletters, legal documents, labour contracts, group insurance, auction catalogues. Locked away inside these publications are some valuable cartography and ship's plans. Many of them are single folded sheets; often no "author," "title," "publisher," "date" - nothing that comfortably fits the great databases of the Internet. Easy to slip into a folder with similar pieces — or keep undistinguished in a mass of similar material acquired from a single collector. The Merrilees Collection at the National Archives offers riches to those in the know; the label means nothing others. Here Barnett seeks out, organizes, indexes the material. The inventory, he hopes, "will...alert public institutions to the need for additional collecting in this area..." And hopefully some of the major private collections of these materials will find their way into public collections where the broad community of researchers can benefit from consulting them.

Barnett has identified 3042 different items, for only one half of which can more than a single location be cited. He estimates that he has captured in this bibliography only about eighty per cent of the literature that was issued. Would that he had included an appendix citing titles which were identified but could not be located. Moreover, some of the most prominent private collections might well have been surveyed for titles that still exist, if not in institutional hands.

The organization of the material is exactly what might have been desired: sub-divided by company, and listed by date. My great pet peeve among bibliographies is the provincial bibliography with an eighty-page section on local histories, listed alphabetically by author! Barnett makes no such gaffès. The compiler is

quite candid about the fuzziness of some of the dating; he is equally frank that some of the companies are hard to pin down. If he's not exactly right (and there are occasions when he isn't) he is at least in the ball park. Information on place and date of publication are supplied in most cases, though frequently with square brackets and question marks. Locational references are supplied in the form of the Interlibrary Loan (ILL) institutional codes, so that NAC becomes CaOOA (the logic is thus: Canada, Ontario, Ottawa, Archives); even better, there's a reference table. Just don't expect to ILL these items!

Added extras include a brief essay on the history of shipping company publications, a chart, five maps locating Great Lakes ports, and thirteen pages of statistics from various government sources regarding passenger volumes out of various ports, and on various lines. The statistics add relatively little to the bibliography, but they are a handy source.

This is a remarkably affordable reference tool, one that many — especially those with collections of this kind of material - will want to acquire. Institutions would do well to survey their collections a second time especially archival collections for things they may have overlooked. As a researcher what would I want to see added? I suspect Barnett has barely scratched the surface of printed documents produced by shipping companies relating to specific litigation. To do so would require a commitment on the part of the bibliographer to dig deeply in various government files. For the larger collections, and the National Archives of Canada is as good an example as any, we need more explicit directions to material than simply the front door. If this bibliography cites only the items explicitly entered in various institutional catalogues then the eighty per cent figure Barnett offers is likely to be a gross underestimate. To the marine researcher the publications of the marine insurance industry, at least in the nineteenth century, are certainly as valuable as many of the company publications. Perhaps this could be addressed in an ancillary publi-

cation. It would also help to include the works of major reproduction efforts in the bibliography. Many academic libraries have a massive collection of nineteenth-century canadiana in the microfiche files of the Canadian Institute of Historical Microreproductions. Many of its 50,000-plus titles are pamphlets and broadsheets. Finally, the focus on shipping companies ignores the fact that many firms were one and two ship outfits, not significantly different in scope and scale from early nineteenth-century operations. There are a modest number of printed items promoting specific ships in the 1820s to the 1840s which it would have been well to document.

AH of this is to return to the question of updating and process. I, for one, would strongly support the mounting of this as an online bibliography — perhaps at Michigan State. Let us use the Internet to query it, and to add to it as new information surfaces. This is a truly ambitious project and one for which the compiler is to be congratulated for undertaking.

Walter Lewis Acton, Ontario

Yrj6 Kaukiainen. *A History of Finnish Shipping*. London & New York: Routledge, 1993. xvi+231 pp., maps, tables, figures, appendix, notes, bibliography, index. £40, US \$72.50, cloth; ISBN 0-415-00158-7.

As the first volume in a series of histories of national merchant fleets, this book constitutes a jump into the deep on the part of its ambitious editor. Although it would be unwise and premature to judge a series of ten or even more individual studies by the quality of the first one to appear, the impression created by that first volume will nevertheless be an important pointer towards the standard of the series as a whole.

Kaukiainen's book on the growth and development of the Finnish merchant fleet throughout the centuries (his account closes in 1991) is a high-quality analysis. In many ways it sets a high standard which his successors, always depending on what source material they may have available for their national studies, may find hard to match. Readers acquainted with Kaukiainen's earlier work, especially his *Sailing into Twilight: Finnish Shipping in an Age of Transport Revolution* (Jyvaskyla, 1991) will see here the epitome of his macro-economic methodology and technique: the reconstruction (or calculation) of, on the one hand, the demand for shipping space arising out of Finland's import and export trades and, on the other, the productive capacity of the Finnish merchant fleet.

This interactive explanatory framework is of eminent value in the understanding of the development and performance of the national fleets of any single country — a task which, as I have remarked often before, is one of the most difficult ones in an industry that is essentially international in nature. Kaukiainen leads the reader with a very certain hand and deft touch through the various stages of gradual integration Finland's into Swedish, North European and finally Atlantic and global economies. Tar and timber, paper and pulp were for a long time the corks on which Finland's exports rested; in due course, passengers, industrial products and, last but not least, crude oil became important commodities on Finland's sea routes. At several stages, however, most notably in the second half of the nineteenth century, Finnish ships were also active in cross-trading on the many tramp routes of the world.

There are many excellent passages in the book, such as those dealing with the geography and political circumstances of Finnish overseas trade and shipowning, the contrasts between urban and peasant shipping, the quantitative and qualitative fluctuations in Finland's trade and shipping, the evolution of the network of the country's ferry services, and the periodic shifts in the balance between employment in the national and cross trades. Of particular interest to me were the many varieties of the use of flags of convenience, ranging from Dutch in-flagging in the 1730s

to the many forms of present-day out-flagging.

Yet, there is a certain imbalance in the book as from the late eighteenth century the Finnish shipping industry appears to operate too much in isolation from the happenings in world shipping in general; at the same time the perspective of the individual owner — the micro-economic perspective — has not always been explored in the same detail and with the same incisiveness as the macro-economic issues. How did Finnish sailing-ship owners operate on the sailing-ship tramp market? Did they have a preference for certain forms of employment based on specialist knowledge and a network of overseas connections or did they operate through brokers on the charter markets of Hamburg and London? Who were the Finns who invested in steamship companies? How did they deal with foreign competition? How did Finnish owners react to the container and roll-on and roll-off revolutions? Or the development of a European shipping policy? Is there a national Finnish shipowners organization? Politics and technological change are taken up as important themes in early chapters, so why not also later on? It would also have been interesting to read more about the remarkable rise of Finnish shipbuilding after 1945 — with companies such as Wartsila - and the impact of these innovative industries on the merchant fleet, and vice versa. And as a consumer of Arabia crockery and Marimekko textiles I have always been interested in finding out how Finland was (and is) articulated to the major intercontinental shipping routes, but that connection is not made.

Finland for a long time was a country on the periphery of Europe. Its export trades and shipping industry ultimately integrated it into the world economy. It is the great virtue of this book to explain the major dynamics of this process. Kaukiainen's assessments, based on a formidable range of material, are a model of judiciousness. He is the expert of the macro-economic approach. If his methodology causes him occasionally to underrate the importance of discussing as well the purer "business" aspects of the industry he analyzes, this does not take away from the strength, cohesiveness and efficacy of his argument. Finland's case has much to say to maritime historians all over the world, including Canada. The new series of national shipping histories has been kicked off with a winner.

Frank Broeze Nedlands, Western Australia

Poul Holm and John Edwards (eds.). *North Sea Ports and Harbours — Adaptations to Change*. Esbjerg: Fiskeri- og Sofartsmuseet, 1992. 264 pp., tables, figures, maps, photographs. 150 DKK, paper; ISBN 87-87453-64-9.

It is an interesting assignment for an academic in a business faculty to review a publication from a history conference for a nautical research society. *North Sea Ports and Harbours—Adaptations to Change* is a collection of papers presented at the Second North Sea History Conference, held at Esbjerg, Denmark in 1991. Ports are of interest to people with very varied backgrounds because of their complex and diverse interactions with the economic, political and social fabric of the local and regional communities of which the ports are a part. As a result, there is much to be learned by examining ports from the perspective of other disciplines.

As the title of the book indicates, the conference focused on the adaption of ports to changing conditions. To achieve this, the conference organizers asked for "problem oriented papers." While the role of problems or challenges is not consistently evident in the papers, as a collection, the papers reflect well on diverse aspects of change in ports. In particular, the papers provide a useful reminder that adaption to change differs among ports in keeping with the varied institutional structures that have evolved in ports over time.

The book includes ten papers from the

conference, eight of which focus on ports as places of trade and shipping. One paper is about female employment in the fishing industry in Stavanger; another is not about port activity. The papers are sequenced chronologically, ranging from the sixteenth century to the present day. There is a conference summary by David Williams which integrates the diverse topics of the volume effectively.

It may not be surprising that my interest is stimulated most by those papers which provide insights relevant to the roles and effectiveness of ports today. Yet most of the papers have some lessons. The exposure of ports to changes in the politics of their hinterlands is as relevant now as it was four centuries ago. Andersen's comparative paper on dockers' culture is a useful reminder of the complex influences on labour productivity and labour relations in ports. The paper naturally leads to questions about the response to change in other ports, including the ports of Bremenhaven and Bremen, described by Scholl. A response in these ports was the establishment of a Port Training Institute.

The different policies of modern ports in responding to opportunities and challenges are described in papers on Bremen, London and Rotterdam. It is evident that there are risks in having quays available for ships and risks in waiting for the needs of shipowners to materialize. Rotterdam has benefited from its policy of anticipating demand.

As Williams notes in his summary, the conference papers deal with the infrastructure, superstructure and labour that make up the ports and with the relationship between ports with their hinterlands. The historical perspective may suggest different approaches to current problems for many readers. It provides an opportunity for those interested in the problems of ports to see the challenges of today in the light of previous experience in a number of cultural environments. It is an opportunity to learn from the past.

The book leads me to suggest that a useful series of papers might be produced on the development of intermodal systems under

containerization. Why have some ports been more successful than others in developing intermodal capability and why do they have different structural features?

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Morten Hahn-Pedersen (ed.). *Esbjerg Havn 1868-1993*, Esbjerg: Fiskeri- og Sofartsmuseet, Saltvandsakvariet, 1993. 168 pp., figures, tables, illustrations, photographs, English summary. DKK98, cloth; ISBN 87-87453-68-1.

After Denmark lost its westward-facing harbours in Schleswig during the Second Schleswig War of 1864, there was a great need for a new port on the west coast. As a result, in April 1868, the Danish King ratified an Act establishing a port at Esbjerg. To mark the 125th anniversary of this occasion, the Fishery and Maritime Museum has published this book, edited by the museum director, Morten Hahn-Pedersen. Though several works on Esbjerg and its harbour appeared in 1937, 1943 and 1968, such attention is understandable. Esbjerg has been the gateway for Danish exports since it was opened in 1874 (though the construction work was not completed before 1878). In particular, Danish agriculture, with its large market in Great Britain has depended on Esbjerg.

This latest book was written by seven authors and is organized into eight chapters which view the city and its port from different angles and perspectives. The first chapter—one of the longest in the book—covers the period before 1868. It illuminates, among other aspects, why other locations on the west coast were not chosen as the place to build a new port. However, in a book which, according to the title, begins in 1868, it is confusing to have a chapter which actually occupies twenty percent of the pages on the previous years. On the other hand, the next three chapters provide a good insight into the history and life of the port from the beginning

to the present. Both its importance to agriculture and the fishery are very well told and illustrated. Chapter four brings this opening section to an end by outlining some significant changes after 1950, supported by valuable statistics and good photographic coverage. The impact of increased industrial fishing after World War II is described in chapter five. The growth in this industry and the increase of ship size contributed to an expansion of the harbour and its facilities; it also made necessary new methods of discharging and storing the catch. Chapter six, based mainly on interviews, has a quite different approach: it deals with the transition from manual cargo-loading to modern containenzation as seen through the eyes of those who witnessed and experienced this evolution. This chapter also reveals the social aspects of harbour life after 1950. Not surprisingly, the author concludes that life was better in the 1950s because of a higher degree of solidarity. Chapter seven on "Oil, Gas and Harbour" looks briefly into how offshore activity in the North Sea has affected Esbjerg. A concluding chapter sums up the experience and tries to forecast Esbjerg's role in the future.

All in all, Esbjerg Havn 1868-1993 gives a good overview of the development of Esbjerg and its port. As an economic historian, I found chapters two, three and four most interesting, with their emphasis on the port's role in the Danish economy and its focus on economic variables. I think it is fair to say that these chapters comprise the core of the book. Nevertheless, because it is also very descriptive, quite readable, and reasonably priced, it should find a large audience among the general reader. Although the book is published in Danish, English-speaking readers will not be completely lost. Every chapter has a short and precise summary in English. This makes the book both accessible and interesting to readers who do not have command of Scandinavian languages.

Anders Martin Fon Bergen, Norway

Walter Bolk. Stettin und sein Hafen: Bilder des Meisterphotographen Max Dreblow. Hamburg: Ernst Kabel Verlag for the Deutsches Schiffahrtsmuseum, 1992. 119 pp., photographs, illustrations. DM 78, cloth; ISBN 3-8225-0191-3.

While arranging an exhibition at the Marinmuseum in Karlskrona in 1989, I received a very dramatic photograph from the wellknown German marine ethnologist Dr. Wolfgang Rudolph. The exhibit was about the dramatic events of 11 October, 1915 when five German cargo steamers were sunk by the British submarine HMS E 19. The photo depicted an abandoned cargo steamer which had drifted ashore under the chalk cliff known as "Stubbenkammer" on Rllgen. Who was the artist? The answer to this question can be found in this excellent book, edited by Dr. Uwe Schnall and published for the Deutsches Schiffahrtsmuseum in Bremerhaven. In it. Walter Bttlk presents and analyzes eighty photographs of the Baltic port-city of Stettin by the master photographer Max Dreblow. Among the pictures is one showing the Svinonia following an attack by the E 19 at the very beginning of the submarine war in the Baltic. The caption indicated that the photographer had taken several photos of the scene from different angles.

Max Dreblow was a grocer in Stettin for whom photography was only a Sunday hobby until in 1897 he became ship photographer, "pier nock artist." He lived on the quay in the centre of the harbour and, among other things, took photographs from his windows, which gave him a bird's-eye view of the harbour. Many of his photos were taken on the eastern pier, 1,500 metres long, at the estuary of the Oder. Ships under sail or steam, naval or civilian, were dramatically caught and pictured as they might appear on the open sea. Dreblow showed in detail what was foreground and background, carefully placing people into the picture as measuring-rods. Sometimes it is apparent that people had been asked to take part in the scenery in order to add a narrative

to the picture. In a photo of a shipbroker's office the clerks were hierarchically arranged in a natural way. Looking at the picture you would feel confidence at the prospect of being served by so many helpful experts. You can be certain that this was the purpose of whomever ordered the picture made. In another photo, taken in a dockyard, we can see a newly built ship. Before the launching a dockyard worker has been ordered to climb out to the big screw propeller to accentuate the power and the speed of the new ship.

Dreblow's photos have been scattered over many countries and continents, as greetings and as keepsakes. I hope that this good book may promote a love of photos as objects of art and encourage people to value the importance of this art in historical documentation. I also hope we will be able to find and enjoy more of Dreblow's sepia photographic postcards, which he created using a technique that he took with him into his grave. The whole of his archives, which was inherited by his successor, was destroyed in the flames of World War II.

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Werner Lahn. Die Kogge von Bremen, Band I: Bauteile und Bauablauf [The Hanse Cog of Bremen, Volume I: Structural Members and Construction Process]; with abbreviated English translation by Judith Rosenthal. Schriften des Deutschen Schiffahrtsmuseums, Band 30; Hamburg: Ernst Kabel Verlag for Deutsches Schiffahrtsmuseum, Bremerhaven, 1993. 250 pp., photographs, tables, bibliography, 37 drawings. DM 378, paper and loose plans in cloth, boxed container; ISBN 3-8225-0186-7.

The physical appearance of this extremely valuable publication is almost as impressive as the scholarship contained in it. The text of 170 pages is punctuated with an almost equal number of photographs. Each German section on specific topics, ranging from port and

starboard floor timbers to the castle roofing to the ship's toilet, is followed by a short English summary of what has been learned during the now twenty-year process of reconstruction about each aspect of the ship. The seventyeight pages of tables with extensive notes give precise measures of the principal dimensions of planking, futtocks and floor timbers excavated in the 1960s from the mud of Bremen harbour. The thirty-seven drawings, accompanied by a fifteen-page booklet in German and English describing those drawings, offer extremely detailed representations of the reconstructed vessels and many of the principal parts in scales of 1:20 and 1:10. Those precise and informative large draughts alone make this publication valuable.

The cog had long been recognized as an important tool in the development of commerce in northern Europe in the high Middle Ages and in the development of that alliance of trading towns, the Hanseatic League. The discovery of this example in 1962 in good condition created an unprecedented opportunity to study the ship type in detail, even though the Bremen cog was neither finished nor among the largest of vessels of its type. The Bremen cog, about 23 metres long, about 7.6 metres wide and somewhat over 3 metres deep in the hold, was under construction in 1380 when it somehow broke free and sank. The investigation and then preservation of this cog has led to an extensive programme for the study of cogs and vessels like them throughout the Middle Ages. That work has made possible the identification of the principal features of the type, down to the characteristic nails which were bent over and then bent again at the tip. That work has also contributed to the establishment of the Deutsches Schiffahrtsmuseum in Bremerhaven and the research programmes of that Museum. In addition two replicas of the cog have now been built for experiments on the handling of such a vessel. If only because of the role of this find in promoting and developing nautical archaeology and the study of maritime history over the last thirty years, it deserves attention.

Werner Lahn is the boatbuilder who was put in charge of the reconstruction of the cog, putting back together all the pieces found at the bottom of the river. He and his staff took more than seven years to figure out exactly where each scrap of wood went. It is that process, now completed, that is documented in great detail in this volume. The drawings have proven extremely helpful not only in the reconstruction but also, by the perspective gained in preparing the draughts, helpful in establishing precise dimensions of planks and of the portions of the ship. Though the reconstruction is complete the preservation of the vessel is not. It continues to sit in a preserving bath in a tank surrounded by windows so visitors to the Museum at Bremerhaven can see the wreck that has inspired so much work.

In describing the different pieces of the ship, Lahn tries to follow the process of construction, beginning with the laying of the keel, the erecting of the posts and the placing of the hull planking. The form of scarphing and the overlapping of planking is described in meticulous detail, often supplemented with photographs, accompanied by captions in two languages, of the relevant parts of the find. Where the technique of construction is not certain Lahn tries to approximate based on what would have been possible. Establishing the identity of each piece of wood, of each treenail or nail required patience and skill. In the process the author and his team were able to find out exactly what shipbuilders did, down to the way they bevelled the upper edges of the keel to make as waterproof as possible the transition from the unrabbeted to the rabbeted portion of that large timber. In some cases, though, finding out the function of pieces of wood has proved elusive, as with a violin-shaped thick piece of oak which was attached to the inner stempost and extended above it. The presence of both a capstan and a windlass caused some confusion. The latter was of a sophisticated construction, balanced and fitted so that sailors could lubricate it easily. The capstan probably came, Lahn thinks, from the same workshop and weighed

about 686 kilograms. The two were operated in much the same way but the immediate question is why two such devices might be needed. Presumably they were used to raise the anchor and the yard and even the sail but whether the second was there to supplement those tasks or to control the mast is never discussed.

One of the disappointments is that such issues of function or use are rarely if ever addressed. The book is a description of the cog's construction. Though understandable, the decision to limit the publication to that goal also limits value. To find out about the use of the cog, about handling such ships, about their importance or even to find out about the task of excavation readers will have to look elsewhere, perhaps to the next volume that is already planned. The bibliography at the beginning of the book, after the informative but short introduction by the directory of the Deutsches Schiffahrtsmuseum, Detlev Ellmers, offers a number of options for finding out more about the background of the investigation and of its impact on scholarship. This work is a highly detailed description of the ship and its building. The task of investigating a shipfind thoroughly is a massive one and Werner Lahn has, in this volume and the accompanying draughts, given a chronicle of exactly how it should be done. Though perhaps not a book to be read for knowledge of the cog in the Middle Ages in general, it is a book which will serve as an example and a goal for which others will strive.

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Roger C. Smith. *Vanguard of Empire: Ships of Exploration in the Age of Columbus*. Oxford: Oxford University Press, 1993. xii + 316 pp., figures, appendices, notes, bibliography, indices. Cdn \$49, cloth; ISBN 0-19-507357-7.

Roger Smith's latest book endeavours to shed new light on the development and characteris-

tics of the Iberian ships of exploration of the fifteenth and sixteenth centuries, principally naos and caravels. In this attempt the author has not only drawn upon the relevant documentary sources but has also incorporated new sources of information from archaeological shipwreck sites dating to the period. This is the first serious book to marry the documentary and archaeological information bearing on these important vessels and, as such, it represents a notable contribution. Unfortunately, some of the information, particularly in the area of construction details, is somewhat dated. A great deal of recent material that is now available has not been included and this mars what might have otherwise been a landmark publication.

The book is divided into nine chapters. It opens with an historical overview of the Iberian states emphasizing the political and economic developments that gave rise to the voyages of exploration and to the ships that made these discovery voyages possible. This chapter provides valuable insight into why certain ship types developed when and where they did. Chapter two continues with a discussion of the evolution, characteristics and the place of naos and caravels in voyages of exploration and discovery. This chapter is essentially an introduction to the next several chapters where specific construction details and outfitting of these vessels are dealt with.

The following five chapters discuss respectively the building, the rigging, the outfitting, the manning and provisioning, and the arming of exploration vessels. The chapter on building covers all of the steps in constructing the hull of a vessel from determining the dimensions, through wood selection, framing, planking to the completion of the upper works. Although detailed and thorough, errors do appear. As a serious example, Smith contends that by the period under study and indeed, prior to this, the frame-first method of hull construction was fully developed. This is clearly not the case. A number of sixteenthcentury vessel finds demonstrate that true frames were only erected in the midship area. The remaining floors and futtocks show no fore-aft fastenings indicating that they were not true frames. They were installed using a system of ribbands running from the midship frames to the bow and stern. This type of construction is evidence of a transitional method between shell-first and full frame-first building techniques. It is mistakes such as these which detract from the book as a whole.

Other errors and omissions are found as well, albeit not as serious. To illustrate, hanging knees were not the only method of tying the deck beams to the frames. On the Red Bay vessel, for example, standard knees were used for this purpose. Further, garboard strakes were not always rebated into the keel. Again on the Red Bay vessel, the garboards were incorporated into an elaborately carved keel timber. Also, the hawse holes were not simply cut through the planking, but rather were fabricated from large timbers that were integral with the hull structure. Smith's contention that floors were sometimes notched over the keel, as seen in the Mataro model. has not been demonstrated on any of the relevant archaeological sites. As a final example, it may be that the rudders of these vessels were more securely attached than Smith states. A detailed study of the rudder from the Red Bay vessel revealed that it was firmly fastened to the stempost and was incapable of being unshipped.

The other chapters detailing the rest of the construction, outfitting and manning of exploration vessels are treated in the same depth as the chapter on building but they too contain errors of the type already outlined above. The chapter on rigging could only have benefited from a more in-depth treatment of blocks. An ample collection of these items now exists from archaeological sites and these could have been used to illustrate the discussion. Chapter eight presents a literature review of primary and secondary sources, other reference material as well as short descriptions of the relevant archaeological sites. This is a useful inclusion which will direct persons interested in the topic to the

most worthwhile documentation. The section on archaeological sites should have included the important wrecks at Villefranche and Studland Bay. The final chapter consists of a short summary of the entire book.

A third of the book is taken up by a series of appendices, notes, a bibliography and two indexes. Readers will likely find these of varying utility. The first three appendices present glossaries of nautical terms in English, Spanish and Portuguese that are used in the main text. The English terms are given short descriptions while simple translations are found for the Spanish and Portuguese terms. Researchers working in Spanish and Portuguese may be better served by consulting more complete dictionaries available in these languages. The fourth appendix offers the inventories of two of Columbus' caravels, the Nina and Santa Cruz. Competently undertaken by Denise C. Lakey, the presentation is complete with facsimile reproduction of the original documents, transcription, translation and editorial comments. This is a valuable addition to the book. The rest of the book consists of notes to the text, an adequate bibliography, an index of persons and places along with a general index.

Overall, the book is well written and provides a wealth of useful documentary and archaeological data on these important vessels in a single source. It is satisfying finally to see an amalgamation of printed historical material and current archaeological information. However, knowledgeable students of the subject will likely find little new information here and may be annoyed by the number of inaccuracies and omissions. This book will serve well as an overview or general introduction to the subject but it fails in the area of specific details. The definitive work on naos and caravels has yet to be written but Smith's book, as a first attempt, is a study to build on towards that goal.

> R. James Ringer Ottawa, Ontario

Anonymous. *The Shipbuilder's Repository; or, A Treatise on Marine Architecture.* 1788; facsimile reprint, Rotherfield, England: Jean Boudriot Publications, 1992. xiv + 472 pp., fourteen plates. £85, cloth, limited to 700 copies; ISBN 0-948864-13-3. £125, deluxe edition, quarter leather, limited to 50 copies; ISBN 0-948864-12-5.

For this fourth volume in its series of reprints of eighteenth-century English works on shipbuilding, Jean Boudriot Publications has chosen the rarest, and perhaps the most informative, of contemporary textbooks. When first published, it offered its readers three rather distinct contributions. First, it provided a summary of what was then known of ship design theory, drawn largely from the works of French authors. Amongst this, the treatment of hydrodynamics seems hopelessly naive, in common with most writings on the subject before Froude's. It does, however, include a description of towing tank experiments which the anonymous author claimed to have conducted, probably the first such attempted in England. His explanation of displacement calculations would, perhaps, have been more useful to contemporary shipwrights, though the claimed method for the calculation of the centre of gravity of the ship actually finds her centre of buoyancy.

The book's second, and major, offering was a full account of draughting, lofting and mould-making methods (the last being probably unique for this era in English). These instructions, which are often hard to follow, were based around a design for an 80-gun ship, with her lines being drawn by the thennew centres of floor sweeps method. (This design was purely a textbook exercise. Indeed, its author rejected it, on the grounds that the displacements before and abaft the deadflat were not equal, though he did not re-draw it.) Where earlier writers had based their analogous accounts of ship design on rules of proportions for determining the radii of arcs of circles, and where Stalkartt, in his contemporary Naval Architecture, wrote of drawing

curves "at pleasure," the *Repository's* author provided extensive tables of offsets. This, along with a general naivety of approach, suggests that he may not have known the rules, nor been able to judge the curves, but was sufficiently trained only to take offsets from a draught and lay them down in the mould loft.

The *Repository's* final original offering was a very extensive (over 200 pages) and thorough set of tables of dimensions, offsets and scantlings for every size of warship from a First Rate to a cutter, along with some data on merchantmen. Unlike that on the 80-gun ship, the information on other classes related to specific (usually named) vessels. Combining these data with the instructions for draughting, contemporary readers could have designed all types of warships. Modern users will find the tables of greater value as a mine of information on late eighteenth-century shipbuilding practices. They will also find the glossary a fertile source of ideas.

The text's only direct reference to a plate relates to one showing the exterior draught of the 80-gun ship, evidently published separately in 1789. Surprisingly, the reprint does not include a reproduction of it other than in defaced form on the dust jacket. Readers might therefore wish to obtain a copy of the publisher's advertising flier for this volume, which does include a small but clear version of this draught. The book also mentions the need for a separate draught showing the internal features of this ship though, if one was planned by the author, it appears never to have been completed. However, a 1791 bibliography claims that the Repository was intended to be published with draughts of all of the ships covered by the tables and that the author was discharged from the dockyards when he was caught copying the relevant originals. As a substitute for these missing plates, the modem publisher has where possible reproduced the original builder's draughts from the Admiralty collection, although that makes this book something more than a true facsimile. These draughts are given fold-out

pages but the small scale at which they are reproduced (about 1:150 for some) and the combination of photo-reproduction of faint originals with the antique-laid paper used for the facsimile text make them poor substitutes for the author's intended copper plates at 1:48. They do at least show the wealth of information that still lies, awaiting study and publication, in the draught room at Greenwich.

This book is an essential source for those model builders who are dissatisfied with reproducing the same tired errors, as indeed it is for anyone interested in the technical details of Nelson's ships. Much has been drawn from it by later authors, from Steel to Goodwin, but serious researchers should have access to the primary source, which this new edition makes possible. Book collectors would be well advised to opt for the deluxe binding.

Trevor Kenchington Musquodoboit Harbour, Nova Scotia

Simon Ville (ed.). Shipbuilding in the United Kingdom in the Nineteenth Century: A Regional Approach. St. John's: International Maritime Economic History Association, 1993; Research in Maritime History No. 4. xii + 195 pp., figures, tables, photographs. US\$15 to non-members, paper; ISBN 0-9695885-3-4.

This book comprises six papers presented at the First International Congress of Maritime History held at the Merseyside Maritime Museum in August, 1992. During the nineteenth century British shipbuilding was internationally pre-eminent. As the editor records in his Introduction, in the twenty years before the outbreak of World War I British shipbuilders accounted for sixty to eighty per cent of world tonnage, of which twenty-five to thirty per cent was built for ship owners outside Britain. Only Germany, and only towards the end of the century, was a second producer of any significance. The development of the shipbuilding industry continued at a time when British industry generally had begun to

be in relative decline.

Previous studies tended to look at the industry in the national context. The papers published here look much more closely at individual regions of the British Isles where shipbuilding was established. In so doing they examine the geographical shifts which took place during the century and the complex causes of the decline and rise of the industry in different areas. The papers cover respectively Scotland, northeast England, northwest England, southeast England and Northern Ireland. Wales is conspicuously missing from the study.

There is, as the editor points out, another important omission. Of necessity from the available source material the papers deal with the building of new vessels. Some yards were much involved with repair work, indeed, some survived on it. But the very difficult subject of British ship repairing is still to be comprehensively studied.

In the very broadest terms the geographical shift was from the south to the north as the wooden sailing vessel gave way after the mid-1860s to iron and later steel construction for both sailing and steam-propelled tonnage. The building of iron and steel vessels was a part of the metal fabrication industry of Britain and tended to be most developed in areas where there were the materials and the skilled labour force for this kind of industrial activity to develop.

This publication is notable for the consistently high standard of the papers it contains and they bring out the story very clearly. David Starkey's excellent study of the shipbuilding of South-West England shows an understanding of this essentially rural region in which shipbuilding never really moved from the era of carpenter and blacksmith technology. His explanation is in part the high local costs of raw materials for iron and steel fabrication, which had to be transported from distant sources, coupled with the absence of local export products.

Nevertheless, as Michael Moss shows, Northern Ireland developed a large-scale shipbuilding industry in iron and steel without local raw materials. His explanation rests in the entrepreneurial and technical skills of Edward Harland and his associates and in the proximity of the Mersey and the Clyde. One may, perhaps, differ from the author's assessment of the uniqueness of the sail assist of the early Harland & Wolf steamers. Highly sophisticated sail assist was a characteristic of steam vessels from their earliest days.

Anthony Slaven's account of the industry in nineteenth-century Scotland is comprehensive and perhaps particularly interesting to some for his statistics of the last burst of steel sailing vessel construction on the Clyde in the early 1890s. In 1892 forty-eight per cent of the river's output was of this class of tonnage.

Frank Neal's account attributes the Liverpool industry's decline to the fact that shipbuilding was simply not necessary for the prosperity of the port whose waterfront property could be put to more immediately profitable uses. In a very broad-base study of the industry in the south-east Sarah Palmer attributes the collapse of shipbuilding on the Thames once again to the transition towards iron, steel and steam, concluding that "failure, like success, is a complex phenomenon."

This is a very valuable publication for all those whose work is concerned with the history of shipping in the nineteenth century.

Basil Greenhill Bohetherick, Cornwall

C.F. Spencer. Spencer on Ships: Modern Commercial Merchant Vessels and Operational Techniques. Worcester: Square One Publications, 1992. 346 pp., photographs, figures, index, cloth; ISBN 1-872017-53-3.

The author, a member of the Society of Marine Engineers and Ship Surveyors, is well-qualified "to fill a gap in the marine library for a reference manual that can provide a broad brush introduction to a variety of vessels" (p.9) with particular emphasis on their features, problems, operations and

cargoes. The book is carefully organized and easy to follow. It is divided into five parts: Merchant vessels — commercial; Merchant vessels — oil industry specials — Glossary; Civil Engineering — Marine Operations; Operational Techniques; and Surveys, Notes. The index is good but could be better. For example, a good, well-illustrated treatment of VLCC (Very Large Crude Carrier) and ULCC (Ultra Large Crude Carrier) vessels wisely introduces and explains sspecialized terms such as stripping and inert gas system. However, there is no index entry for stripping, "the act of draining the last of the liquids using a smaller pump than a main cargo pump." (p. 70) There is an entry for "inert" but not for inert gas system. Yet the entry under "inert" leads the persistent reader to a very fine summary with a schematic of the operation, advantages and disadvantages of inert gas systems, (pp. 236-237)

Cover-to-cover readers will gain an enriched operational understanding of modern shipping ranging from basic description, special features, terminology, basic design, strengths, weaknesses and potential problems due to carelessness or design. Excellent photographs and diagrams supplement text admirably. See for example figures 42-44 on jetfoils.

Reference readers seeking information in a hurry will also find *Spencer On Ships* rewarding. It would be invaluable to journalists reporting on maritime incidents or to those involved in public discussion of technologies such as marine transport of LNG (liquified natural gas). The "inspection of cargo tanks for breakdown of insulation, or 'cold spotting' as it is known in the trade, is an awful job involving crawling round inspecting all parts of the tank externals." (p.58) One might reasonably ask what is being done to ensure adequate inspection in a world where awful jobs sometimes go undone.

Spencer's droll observation that "passengers have been described as hazardous cargo particularly those of United States origin due to the claims that can be levied on Owners for negligence" (p. 19) is a reminder that the

weakest or most threatening links are often human. Many experts now see the often outrageous settlements of American courts as the largest single barrier to technological innovation in the United States. Spencer's wisdom and experience comes out in his statement that "Fire detection systems are no substitute for fire fighting systems and the main safety feature must remain a fully trained professional crew who have a full understanding of their own vessel. Mixed nationality crews are not necessarily a huge advantage except in economic terms." (p. 15) Why are we unable to act effectively on observations such as these? We seem to lack the will to match technology and society properly.

In the reviewer's office, *Spencer On Ships* sits alongside Alastair Couper's *The Shipping Revolution* (to be reviewed in the next issue of *The Northern Mariner/Le Marin du Nord*). They are different but complementary. Both will be used frequently. The reviewer hopes that in the next edition of *Spencer On Ships* he will add engineered ice islands to "Man made islands" in Part 4, Civil Engineering. The engineered ice islands represent an ingenious and effective part of the Arctic's maritime heritage.

Norman R. Ball Waterloo, Ontario

A. A. Hoehling. *Ships That Changed History*. Lanham, MD: Madison Books, 1992. xvi + 182 pp., photographs, maps, bibliography. US \$19.95, cloth; ISBN 0-8191-8072-6.

The author, a former editor of the *U.S. Army Times*, has chosen one type of ship, four individual vessels, and an event to support his theme of historical turning points. Unfortunately, he never makes his criteria clear, and seems to assume instead that his choices are self-evident. They are not.

Hoehling's first choice is the fast sailing ship, or clipper, first built by the Canadianborn constructor, Donald MacKay, in Boston beginning in 1845. In contrasting his interest-

ing narrative on the great American vessels and life on board, he excludes reference to the Canadian-built *Marco Polo's* record passages to and from Australia in the 1850s, while the British *Cutty Sark* is mentioned once and *Thermopylae, Taeping, Ariel,* and other participants in the 1866 tea race not at all. He forgets that the opening of the Suez Canal made the clipper ships' long voyages unprofitable, and maintains instead that the American Civil War ended the clipper era. Hoehling's sources do not include such authorities as Jobe's *The Great Age of Sail* (1967) and Knight's *The Clipper Ship* (1973).

In relating the story of the construction and career of the *Great Eastern* in his second chapter, Hoehling fails to explain how that ship changed history. Brunei died before the vessel's first voyage, while Sir Daniel Gooch of Great Western Railway fame never owned *Great Eastern*, he only chartered it to lay transatlantic cables. A better choice for shaping the world history of the development of the ship would have been Brunei's *Great Britain*, the first iron steamship to enter the Atlantic trade. Perhaps Hoehling should have relied on Rolfs 1978 biography of Brunei, rather than one published in 1938.

Hoehling's most convincing choice of a ship that "changed history" is USS *Monitor*. That vessel, designed by John Ericcson, with its steam-driven revolving turrets and 11-inch guns, marked a revolution in naval construction. Hoehling includes a lively account of the action with CSS *Virginia*. However, he is incorrect in stating that the first British oceangoing turret ship was HMS *Devastation* of 1873. That ship had been preceded by *Monarch* in 1869 and *Captain* of 1870. And there are other inaccuracies. For example, HMS *Inflexible* was not sunk at Jutland.

Hoehling's fourth choice of a history-changing ship, RMS *Lusitania*, is marred by a journalistic account of that tragedy. This chapter might have been improved had he been familiar with P. Beesly's excellent 1982 analysis, *Room 40*. The ruthless act brought the United States closer to the Allied side, but

much more was to follow, including unrestricted U-boat warfare, before America could be brought into World War I.

Hoehling's book includes a description of the 1940 evacuation of Dunkirk. He maintains that "The Nazis swept into Norway with little or no resistance;" in fact resistance in Norway lasted over two months; in contrast, France was defeated in six weeks. Hoehling also fails to mention that forty-eight Dutch *Schuyts* rescued 22,698 men from the beaches at Dunkirk. His source list omits that authoritative work, Roskill's *The War At Sea*. Indeed, one is left wishing for further particulars about his "vast research."

The final chapter comprises eye witness stories of the attack on Pearl Harbor and the destruction of USS *Arizona*. Surely it was the attack that changed history, not the destruction of one battleship!

By now, it should be clear that the book is not history but a series of journalistic articles, the result of limited research, and with an irritating style that includes jargon such as "happenetize." The criteria used to select the ships that "changed history" is not defined or self-evident. Curiously, though he is the author of *The Fighting Liberty Ships: A Memoir* (Kent State University Press, 1990), Hoehling has virtually ignored the vital contributions made by the "Liberty" and "Victory" ships to the outcome of World War II.

Dan G. Harris Nepean, Ontario

Robert Parsons. *The Wake of the Schooners: From Placentia to Port aux Basques.* St. John's: Creative Publishers, 1993. xii + 272 pp., photographs, maps, appendices, sources. \$14.95, paper; ISBN 1-895387-24-8.

When Robert Parsons chose the title for this book, he was, perhaps, not unaware of the fact that a wake may be either the track left behind by a passing ship or a vigil beside a corpse that has been prepared for burial. Whichever definition he had in mind, the

word is appropriate for the book does preserve the track, in the sense of the memory, of ships that have passed, but it is also a book about death: the death of proud vessels that have come to tragic ends on the storm-battered coasts of Newfoundland or in whatever other great waters thy may have exercised their business.

In short, we have here a catalogue of disasters: a sort of annotated list of some one hundred or so wrecks culled from among the ten thousand or more that are part of the Newfoundland story. Culling implies some degree of commonality and, apart from the single theme of disaster, the chosen cases are all linked by association with the South Coast - Placentia to Port aux Basques, as the title says. Apart from this, the author does make some approach to a thematic treatment, dividing his material into chapters with headings like "An Added Danger - German U-Boats 1915-18," "Cut Down by Transatlantic Steamers 1936-38," and "Prohibition and the Great Depression 1930-32," among others. Nevertheless, the treatment is essentially chronological, commencing with the wreck of the Monasco in 1857 and concluding with the disappearance of the Cape Royal in 1977. Within that 120-year span, virtually every conceivable type of marine tragedy is canvassed: vessels that succumb to the fury of the elements: vessels that run upon enshrouded shores; vessels blown from the seas by the shells and torpedoes of an enemy; vessels cut in half by great steam ships that barely notice the collisions; vessels that burn; vessels that spring a leak and sink; vessels that founder under the too-great weight of cargo; vessels that die from pure misadventure; vessels that perish because of poor seamanship or inadequate navigation; and, vessels that simply disappear without trace.

Though there is inevitably a hint of morbidity in such a collection, the overall effect is curiously clinical. Nor does the author recreate successfully the atmosphere of a time when news of significant community value was orally transmitted and when the

spinning of yarns was an enormously important form of social intercourse that provided, not only entertainment, but as well the reinforcement of community values. For though many elements of the traditional yarn are here present, one seeks in vain for the sense of immediacy, the breathless hanging upon every word, the adrenalin rush of response to the challenge of mighty elemental forces, the cold shadow of fear, the triumph of heroism over danger, the despair of the lost, the icy clutch of horror that grips the helpless standers-by. It is true that in the tale of the Monasco, for example, elements of the standard folk tale are to be glimpsed: the wicked captain, the bejewelled lady, dark deeds of murder and robbery, a subsequent life of ease in the United States. But in general the stories are well sterilized, not only of the high emotion that tales of heroism, of great feats of seamanship, of hardihood and of daring-do, would have evoked, but, equally, of the slyly suggested plans to defraud the insurance companies, of hinted incompetence, of poor seamen consigned to doom by greedy owners and toady captains, and, most surprisingly, perhaps, of the supernatural. In brief, Parsons' telling is a dispassionate recounting of the facts as he has been able to establish them.

While this, to one suffering from nostalgia for a vanished past, is disappointing, the book does have its uses. It brings together in a single source the easily establishable facts about the fate of a hundred or so Newfoundland vessels. In so doing, it records the testimony of many eyewitnesses whose knowledge would otherwise have died with them. Additionally, it provides a small mine of information about the daily round and common tasks of fishing, coastal trade and foreign going vessels engaged in the Newfoundland trade and thus becomes a significant source for those who would study our social or economic history. The additional titbits of information about specific vessels and owners provided in the appendices are interesting and useful; the photographs with which the book is profusely illustrated are generally excellent

and one could only wish for better reproductions on better quality paper.

> Leslie Harris St. John's, Newfoundland

Alan Easton. *Terror on the Coast: The Wreck of the Schooner Codseeker*. Halifax: Nimbus Publishing and the Nova Scotia Museum, 1992. iii + 41 pp., illustrations, map, sail plan, glossary. \$6.95, paper; ISBN 1-55109-025-2.

It is very difficult for us today to realize the importance of shipping to the economy of the Maritime Provinces, especially during the late nineteenth century, and the very large number of vessels which were sailing at that time. In 1878, the year after this story took place, Canada had a merchant marine of 7,467 vessels totalling 1,333,015 tons and stood fifth in the shipowning countries of the world. Of this number, 4,467 vessels totalling 943,583 tons were registered in the Maritime Provinces. A very large proportion of these vessels were small fishing schooners like the Codseeker. With only sail for power, and before the age of radio communications, these vessels and their crews were often totally at the mercy of the elements when disaster struck and the chances of survival and rescue by another vessel were very slim indeed. The sea took a heavy toll, and dismastings, strandings on shore and total losses were common. Many vessels disappeared without a trace.

This is the story of the *Codseeker*, a fishing schooner from Barrington, Nova Scotia which capsized in a gale on her maiden voyage in the spring of 1877 with the loss of four of her twelve-member crew. The author describes, in vivid detail, the capsizing of the vessel, the exhausting and dangerous journey to shore by Captain Brown with two of the crew, the courageous and heroic rescue of four of the seamen from the capsized hull by the schooner *Matchless* and later the miraculous rescue by the American schooner *Ohio* of the two men who had been trapped inside the hull for four days. Using contemporary

sources and official records the author has told the story in gripping detail. Alan Easton is a master mariner who knows the sea and the language of the sea and the official accounts have been retold with great skill, understanding and imagination.

The illustrations by Ivan Murphy are extremely well done and capture the mood of the story. The sail plan of a schooner, showing the standing rigging and running rigging, and the glossary of terms found at the end of the book are both excellent.

This is a must for anyone interested in the sea and in the history of the age of sail. My only complaint is that there are no references and no bibliography. These sources are readily available today and their inclusion here would be extremely valuable to anyone researching similar stories for a book on shipwrecks or tales of heroic rescues. If there were more books like this one on the market, especially for the use of schools, then perhaps we would have a better understanding and appreciation of our seafaring history.

Charles A. Armour Halifax, Nova Scotia

Gregory P. Pritchard. *Collision at Sea: The Little-Known Marine Tragedy Felt on Both Sides of the Atlantic*. Hantsport, NS: Lancelot Press, 1993. 178 pp., maps, photographs, appendices. \$10.95, paper; ISBN 0-88999-538-9.

Gregory Pritchard sailed in convoys during World War II and continued to serve at sea until 1962. He then was ordained an Anglican priest and appointed to Blue Rocks, Lunenburg County, Nova Scotia. He soon became aware of an inordinate number of widows and fatherless children in his community. Many were dependents of fishermen who had lost their lives in 1943 in the sinking of the schooner *Flora Alberta*. She had been fishing southwest of Sable Island when, in thick fog, she and a merchant ship *Fanad Head*, sailing in convoy and bound for the United Kingdom,

collided. The schooner quickly sank with the loss of twenty-one lives.

In the early days of the war Pritchard had served in a sister ship to *Fanad Head*. Her captain and some of the crew came from Islandmagee in Northern Ireland, a rugged place similar in many ways to Blue Rocks. To this tenuous link he attributes his concern, that so many in the community had so little knowledge about the collision which had affected their lives so dramatically. He became determined to learn the facts, but it was not until 1987 when he retired that he was free to devote his time to the necessary research.

With his long experience in the Merchant Service in war and peace, now living in a community of fishermen and their families, Archdeacon Pritchard was admirably suited for gathering together all the elements of the collision and investigations in a comprehensible form. He begins by recalling the morning in April, 1943, when the Anglican minister at Blue Rocks visited a number of homes in the village with the terrible news that *Flora Alberta* had been lost and that there were few survivors.

As the tale unfolds, Pritchard reveals the life and nature of the people and their way of life. Schooner fishing of that time is described: the financing, the share system, the construction, launching, fitting out, manning and fishing routines as developed over a century. In 1943 the Battle of the Atlantic was raging, but fishing on the banks continued as usual despite the numerous convoys and probable enemy submarines. There are brief sketches of some of the crew and their families. These are especially poignant, because all the names are still common on the South Shore of Nova Scotia.

This is followed by a description of the Head Line and *Fanad Head* with her crew of Ulstermen. They sailed in ballast from Belfast for Saint John where they loaded grain and started back for the United Kingdom. A vivid picture is painted of convoys and the day-to-day activities in merchantmen. Then comes the sudden shock of collision in fog, the

sinking schooner, rescue attempts, landing seven survivors in Halifax and joining another convoy for home.

In September 1944, an action for damages against the owners of *Fanad Head* was filed in Halifax by *Flora Alberta's* insurers. The case was heard in Halifax five times, twice in London and in Ottawa once, over a period 1945 to 1949. The conclusion was that, rightly or wrongly, Head Line paid \$60,000 less costs to the schooner's insurers. Relevant parts of each hearing are reported verbatim.

Collision at Sea is a gripping study by an experienced and knowledgeable mariner of a collision and its consequences. It was intensely interesting to the reviewer, who is humbly thankful to have been spared such a tragic experience.

L.B. Jenson Queensland, Nova Scotia

James P. Delgado. *The* Beaver: *First Steamship on the West Coast*. Victoria: Horsdal & Schubart, 1993. vii + 54 pp., maps, photographs, figures, notes, bibliography, index. \$10.95, paper; ISBN 0-920663-20-6.

The story of the Beaver, the first sidewheel paddle steamer in the North Pacific, is a familiar and romantic one. Launched in England on 2 May, 1835, she made the long voyage to the northwest coast under sail, only shipping her paddle wheels after her safe arrival at Fort Vancouver, on the Columbia River, on 10 April, 1836, 225 days out of Gravesend. She never returned to the Columbia but spent the rest of her long life as a fur trading vessel for the Hudson's Bay Company, operating between Puget Sound and Sitka, as a passenger ship during the Fraser Gold rush, as a survey ship for the Royal Navy in British Columbia waters, and then as a humble towboat.

The *Beaver* ended her career on the night of 25 July, 1888, when she ran ashore at Prospect Point, near the First Narrows of Burrard Inlet, while outward bound from the

infant city of Vancouver. Legend has it that the crew had been celebrating at the Sunnyside Saloon in Gastown before setting out. At any rate, they made little effort to save the vessel and walked back through the dense woods of Stanley Park to continue their party at the Sunnyside.

She lay wedged on the rocks, well above sea level at low tide, and quickly became the prey of souvenir hunters, who stripped away her fittings, equipment and timber. Practically every household in Vancouver soon had a souvenir of the ancient vessel, which remained accessible until she slipped off the rocks into deep water, the result of a heavy wave from the passing steamer *Yosemite*.

The staunch little *Beaver* passed into the history books, but it was not the end of the story. With the advent of modern deepsea diving techniques, the site of her wreck is now available to marine archaeologists, one of whom is James P. Delgado, director of the Vancouver Maritime Museum, and the author of this fascinating new book about the steamer. The Museum's interest in the *Beaver* is strong, for it has many of her relics on permanent display, including the last of the five boilers which the *Beaver* had during her lifetime.

The remains of the wreck were discovered off Prospect Point by amateur diver Fred Rogers and three of his friends in September 1960. They emerged with a treasure trove, including pieces of the machinery, brass valves and sections of steam pipe, most of which they gave to the Vancouver Maritime Museum; in those early days of diving on the coast, no thought was given to leaving the artifacts from the steamer on the bottom or to an archaeological study. In April 1964, Rogers returned to the wreck and recovered brass and copper fittings, and an anchor found at a depth of forty feet. The wreck then lay undisturbed until 1986, when divers from the Underwater Archaeological Society of British Columbia and the Vancouver Maritime Museum began to survey the remains. Funded by the provincial government, they are making a map of the *Beaver's* remains. Their object is not to gather further relics, but to learn about the past. It is a continuing project. Every piece of wreckage, from large iron castings to scattered timbers and brass spikes, has been plotted.

Delgado's book tells the entire fascinating story, from the *Beaver's* construction to the revival of interest in its shattered remains. In addition to a brief but scholarly history of the *Beaver's* active career, the book gives us a survey map of the wreck site, prepared by the Underwater Archaeological Society, showing the many artifacts still remaining on the sea bottom. The map is already becoming out of date as more discoveries are made.

A notable feature of the book are detailed drawings of the original boiler, paddle wheels and firebox, fortunately preserved at the Birmingham Public Library in England. There are also a rigging profile of the *Beaver*, deck and interior plans, prepared by the Vancouver Maritime Museum. The old steamer may be dead for more than a century, but she still fascinates marine historians and diving enthusiasts, such as the author of the book.

Norman Hacking North Vancouver, British Columbia

Richard E. Wells. *The Vancouver Voyages of the Barque Pamir*. Victoria: Sono Nis Press, 1992. 137 pp., maps, figures, photographs, appendices. \$12.95, paper; ISBN 1-55039-029-5.

This must be one of the very last books devoted to the end of commercial sail written by one who was in some ways connected to that period. As Leonard McCann, Curator of the Vancouver Maritime Museum, writes in his very understanding foreword, "This is not the complete history of the *Pamir* — that has been undertaken elsewhere in an exemplary record. Rather, this is a detailed look at the life of a working sailing ship, largely within British Columbia waters, presented in a manner that is most uncommon. The conjunction

of the records of a sailing ship and of the powered vessels with which she was inevitably associated provide a unique approach to the documenting of maritime history..."

In his introduction the author gives a brief account of Pamir's life under German and Finnish ownership, her take-over by the New Zealand government as a prize of war in 1941, and her first five voyages under New Zealand flag to the West Coast of the United States. He then records her last trans-Pacific voyages to Vancouver and her only voyage to the United Kingdom under New Zealand flag in great detail, covering sailing conditions, freights, profits earned and losses taken and maintenance and crewing problems. He gives a clear picture of what it meant to keep a commercial sailing vessel going in the 1940s. It is a picture that dreamers, intent on rejuvenating commercial sail as this "blessed" century draws to a close, would be well advised to look at closely.

Having served aboard Passat, Pamir's contemporary as it were, Wells' book touched a responsive chord or two in me and evoked memories galore. As a boy I went aboard her in Hamburg just before she was sold to Erikson. In 1949 I met her again at Port Victoria in South Africa, just after her return to her Finnish owners by the New Zealand government but still with her New Zealand crew with the exception of her former Finnish master. To us aboard Passat, Pamir was grossly over-manned, and her crew grossly overpaid with their Union steamer wages which included overtime for any "all hands on deck" manoeuvres, something which was unheard of by us aboard Passat. No wonder relations between the two crews were not all that friendly! My slightly out-of-whack nose still bears witness to that fact. And no wonder that Erikson lost money on her in a big way on her last commercial voyage with bagged barley from Port Victoria to the U.K. During the winter of 1949/1950 I looked after Passat and Pamir at Penarth Dock and during the discharging of their cargo at Barry Docks. Two years later I met *Pamir* again when she,

like *Passat*, were being converted to cargo carrying training ships...

But enough of memories. What makes this book so unique is that Wells, a tug-boat man, describes from his own experience what it meant to get a large square-rigger in and out of port. From the 1870s on, large squareriggers were entirely dependant on tugs to get them into and out of harbours. His chapters on the difficult tug-boat service on the West Coast are illuminating to say the least. Who of the deep-sea seamen ever gave a thought to the service provided by tugs — unless they were in danger of running aground? Wells' thorough coverage of the tugs involved with Pamir, their work and their histories, add tremendously to this volume. Where else has the work of such tugs been described?

The book is profusely illustrated with nearly one hundred photographs, ship plans, maps and splendid drawings by the author. Best of all are the photographs taken of *Pamir* leaving British Columbia in gale force conditions. I have never seen the likes of them.

To maritime historians, to maritime museums, to ship lovers and anyone interested in the very last period of commercial sail, I recommend this book highly; it is well-produced and a pleasure to behold, and all for a very reasonable price. My thanks go to the author who brought it all together and to the publishers who produced such a fine volume.

Niels W. Jannasch Tantallon, Nova Scotia

Geoff Robinson and Dorothy Robinson. *Duty-Free: A Prohibition Special*. Summerside, PEI: Geoff and Dorothy Robinson, 1992 [order from the authors, Tyne Valley, Prince Edward Island, COB 2C0]. 122 pp., map, photographs. \$14.95, paper (\$18 if ordered directly from the authors); ISBN 0-9691943-7-4.

This is the most recent of three books published by the Robinsons on rum running and allied occupations in the Maritime provinces and St. Pierre and Miquelon during the years

of Canadian and American "Prohibition." In the broadest sense it is concerned with the maritime history of eastern North America from Newfoundland to the Caribbean during the 1920s, '30s, and '40s, but because it was written for a general audience, it has many of the characteristics of "local histories."

The book is based on oral testimony provided by old-time rum runners and bootleggers as well as research in archives from Newfoundland to Ottawa and even Guyana (ex-British Guiana). Much of the text consists of stories of Canadian rum-running vessels, how they got their supplies and landed their cargoes, seizures, court cases and government investigations. Six chapters describe the careers of rum runners and bootleggers, most of them residents of Prince Edward Island. while one chapter is on hijackings of Canadian and French rum running vessels on the American East coast. Some chapters include new material to their earlier publications; the chapter on two large rum running vessels supplements the history of Captain Teddy Kirk in their second book // Came by the Boat Load (1983), while another is a short version of part of their history of The Nellie J. Banks (1980). Two others concern the identification of pictures of that schooner and a commemorative St. Pierre and Miguelon postage stamp issued on the fiftieth anniversary of her final seizure as a rum runner.

The book is well written and except for mis-naming two government vessels and attributing a photograph of another to the wrong source, no errors have been noted. The amoral disregard for Customs and prohibition laws by the rum runners is so constant a theme that the words "illegal" and "illegally" only appear seven times in the whole text twice in reference to illegal seizures by government patrol vessels! As a result of the same partisan approach there are some misleading statements about the kinds of law enforcement and the duration of prohibition in Canada. Moreover, while the authors usually give the names of their informants and the archives where information was found, there is no bibliography. And while other books on rum running are mentioned in two of the few footnotes to the text, most of those footnotes refer to chapters in their earlier books.

> David J. McDougall Lachine, Quebec

Norman Hacking. *Captain William Moore, B.C. 's Amazing Frontiersman.* Surrey, BC: Heritage House Publishing, 1993 [Box 1228, Station A, Surrey, British Columbia V3S 2B3]. 62 pp., maps, illustrations, photographs. \$5.95, paper; ISBN 1-895811-02-3.

Norman Hacking has been deeply involved with the marine history of British Columbia most of his life. For decades, he was marine editor for the newspaper, the Vancouver Daily Province, writing a column called "Ship & Shore." While I have not read his graduating thesis for the University of British Columbia, about historic stemwheels plying the treacherous rivers and inland lakes of this western province, those who have, have suggested he should publish it. Hacking did write a series of articles regarding the history of stemwheelers for B.C. Outdoors in the late 1970s, so it comes as no surprise that he should write this little book about Captain William Moore, whose photo graces an inset on the cover, along with a full colour photo of the government stemwheel steamboat Samson V on the Fraser River.

As this book points out, Captain Moore was bom for adventures that very few men would undertake, and he did not let his later years of life slow him down. He was a true pioneer river man and explorer, never hesitating to dash into the British Columbia wilderness when he heard that gold was discovered in unbelievably remote areas of this country.

Hacking has dug deeply into Captain Moore's life. He first came to British Columbia in 1852, when gold was discovered in the Queen Charlotte Islands. At that time it was no place for anyone easily intimidated by

hostile aboriginal people. Moore also joined the gold stampedes on the Fraser River in 1858, the Stikine River, the Cariboo, the big bend of the Columbia River, the Omineca and Cassiar country, the Klondike and finally, when he was age 78, Nome, Alaska.

During these events, Captain Moore often worked together with his sons in the gold camps. He took contracts building trails into the wildest country to provide access to the gold fields, and often came out a rich man. But he gambled his fortunes building steam boats and competing with his rivals, Captain William Irving and his impetuous young son, Captain John Irving. At times, he was forced off the Fraser River by ruinous rates; he then would take his sternwheel steamers to the Skeena and Stikine Rivers where he accumulated considerable wealth. His love of doing things in a grand way, frequently led to some bad investments. Thus, in 1863, he had the sternwheel steamer Alexandra built, the biggest ship to navigate the Fraser River. His timing was wrong, and the vessel too large and costly to operate. Nor could it negotiate the shallow river in fall and winter: in contrast, his competitor's smaller ships kept earning money. Consequently, he went bankrupt and lost his fortune. Surprisingly, he made the same mistake in later years. losing other fortunes. He was a rich man several times and a poor man at least three times.

Moore's life is neatly summed up by Hacking, who says that "As a sailor and river steamboatman he had few equals, while his endurance as an old man on wilderness trails was incredible." As an example, Hacking mentions how, in 1896, Moore contracted with the Canadian government to deliver winter mail by dog team six hundred wilderness miles, from Skagway to Forty Mile on the Yukon River. He completed his contract successfully, though on his last trip temperatures dropped to -50° F. Moore was then 73 years of age. He died in Victoria in 1909.

Unfortunately, most readers will not get the full story about the rivalry on the rivers; about how ships often raced neck and neck up the Fraser, crowding rival steamers into shoals to gain headway. He does tell how the lives of the crews and passengers were placed at risk with excessively high boiler pressures, but he leaves out most of the disasters when river steamboats did explode their boilers. These stories, however, can be found in another book, *The Princess Story: A Century and a Half of West Coast Shipping,* which Hacking co-authored with W. Kaye Lamb.

A.C. (Fred) Rogers Qualicum Beach, British Columbia

Eric Sager. *Ships and Memories: Merchant Seafarers in Canada's Age of Steam.* Vancouver: UBC Press, 1993. x + 179 pp., photographs, notes, glossary, sources, index. \$29.95, cloth; ISBN 0-7748-0443-2.

Here is a book that provides a fascinating, detailed and authoritative account of Canada's merchant marine, coupled with memorable yarns told by seafarers who served in these ships during the three decades from 1920 to 1950 when the Age of Steam witnessed the final demise of sail and the advent of dieseldriven merchant ships. In preparing the interesting material contained in this book, Eric Sager personally interviewed numerous retired merchantship personnel through the ranks of masters, licensed officers and unlicensed seafarers on both Canada's east and west coasts, from whom he has drawn a beneficial cross-section of knowledge and experience.

The author takes the reader through a series of historical shipping events, commencing with the CGMM, a crown-owned company which consisted of sixty-three dry-cargo ships in the early 1920s and which, until its close in 1936, employed more than 2,300 mostly Canadian seafarers and plied international waters. By the onset of World War II in September 1939, Canada possessed only thirty-eight ocean-going ships. It was during the war that Canada's shipbuilding industry reached peak performance, when almost four hundred merchant ships were built. Of these,

about 176, named for Canadian Parks, were operated by the crown-owned Park Steamship Company Limited. By 1950, the year which marked the end of Canada's Age of Steam, most of the Park ships had been sold to foreign-flag interests.

Since history, as an academic discipline, is usually a written compilation of unbiased prose by an academic and perhaps read predominantly by historians themselves, the author has done a remarkably good job in locating and interviewing seafaring personnel and recording their past experiences from memory, thus lending the content meaning and substance and presenting a work that the average reader should find interesting and enjoyable. Sager has used oral history to enhance his book with appeal and power and has combined the authority of an academic with the anecdotes of working people in creating their own history, thus bridging the gap between professional historians and retired seafarers.

Throughout the book, the gender-neutral word "seafarer" is used in lieu of the word "seaman," in order to dispose of the fanciful concept that seafaring is a male-dominated occupation. Sager is careful to acknowledge the women who also served in Canada's merchant fleet, particularly in the victualling and catering service in passenger ships. Chapter two includes an interesting interview with Miss Molly Kool, who attended nautical schools in Saint John and Yarmouth and who, in 1939, became Canada's first certified woman master mariner.

The high-point of Sager's work, in my opinion, is the collection of stories told by the participants: tales of good and bad times at sea, struggle, hardship, loneliness, escapades in seaports around the world and, of course the generous and spontaneous comradeship of seafarers and the sea. These make the book a worthy and genuine documentation of the oral history of a bygone era.

R.F. Latimer Dartmouth, Nova Scotia

Joan Druett (ed.). "She Was a Sister Sailor": Mary Brewster's Whaling Journals, 1845-1851. Mystic, CT: Mystic Seaport Museum, 1992. xx + 449 pp., maps, illustrations, appendices, bibliography, index. US \$39.95, cloth; ISBN 0-913372-60-9.

Joan Druett, a New Zealand teacher, journalist and novelist, was intrigued by the discovery in 1984 of a gravestone on a beach of Rarotonga, one of the Cook Islands in the South Pacific. It marked the grave of the young wife of the captain of an American whale ship who died in 1850. Unaware that women had accompanied their whaler husbands on three-tofive year voyages out of New England in the nineteenth century, Druett began enquiring. The result is this absorbing volume of the edited journals of Mary Brewster, who made two voyages after sperm and right whales on the ship *Tiger* out of Stonington, Connecticut with her husband William and a ship's complement of thirty men. Druett has counted and listed in the appendix 443 women who went whaling. She also provides an annotated list of the logs, journals, letters, and reminiscences of the whaling sisters which are in public hands. Mary Brewster's journals, she found, are the earliest American female whaling journals on that list.

With little to do aboard a whaling ship, Mary wrote faithfully each day on the first of her two voyages; each day, that is, after the first month when she was too seasick to get out of bed. She recorded wind, weather, sail handling, the ship's position, other ships spoken, whales sighted, whales made fast, boats stove, men killed or injured, whales cut in, blubber boiled, oil stowed, and her accomplishments in sewing. Her descriptions of the Tiger riding out a number of vicious storms, sails shredded, decks swept by green water, are real enough. And her comment reveals a firm resolve to weather it all, no matter how terrifying. She seems to have had a fine mastery of positive thinking.

One sees a gradual progression in Mary Brewster's sense of place in a whaling ship, a

growing confidence. As the years wear on, she gains an insight into the demanding role of the captain and participates vicariously in his moments of crisis. While certain of her husband's competence, her anxiety is apparent when the *Tiger* enters the Arctic Ocean on their second voyage, and fog, ice, treacherous currents and uncharted rocks present endless emergencies. Not only was *Tiger* one of the first whalers to enter the Western Arctic, Captain Roys having ventured through Bering Strait only the previous season, Mary Brewster was the first "civilized female," in her own words, to go there.

Her observations of whalemen at sea *without* their wives, of missionaries, of happily naked Polynesians, her ruminations about the safety of her soul and the wickedness of whaling on Sundays, her abhorrence of miscegenation, are no surprise in a well-bred New England woman of the period. Yet one sees a maturing of her judgment as she becomes seasoned to life on a whaling ship.

The *Tiger's* first voyage to the Pacific and back by way of Cape Horn is treated in five sections. The second voyage, during which Mary made only intermittent entries, is treated in one section. It entailed a circumnavigation going eastward and included whaling in the Arctic Ocean. The editor has prefaced each section with an essay to provide context. These and extensive footnotes supply supporting excerpts from other whaling wives' journals. One has, as a result, not just Mary Brewster's experience, but the collective experiences of the whaling sisterhood.

While researchers may appreciate the footnotes, checking every whale ship mentioned with entries from the New Bedford Whalemen's' Shipping List and Merchants' Transcript, the Boston Shipping List, and a number of newspapers, this reviewer found them distracting. One might wish, too, that the charts upon which the *Tiger's* route was marked, had been explained. They are interesting in themselves, being sections of a Whale Chart prepared in 1851 by Lieut. M.F. Maury, US Navy, showing the seasonal inci-

dence of sperm and right whales in the oceans sailed by whalemen.

Joan Druett's research is impressive, her commentary and notes enlightening. She has prepared a volume useful to anyone with an interest in whaling history, Pacific Island history, and women's issues. Mary Brewster, who most certainly did not expect us to be reading her journals, will no doubt be admired for her candid and wry commentary on life on the rolling wave. Too bad the book is too heavy to read in bed! It's entertaining.

Joan Goddard Victoria, British Columbia

David Proctor. *Music of the Sea*. London: Her Majesty's Stationery Office (HMSO) in association with the National Maritime Museum, Greenwich, 1992. x + 150 pp., illustrations, references, select bibliography, index. £12.95, paper; ISBN 0-11-20-520-X. Distributed in the United States by UNIPUB, Lanham, MD.

I suppose I am not the right person to review David Proctor's *Music of the Sea*, since I am American (his is a very *British* book) as well as one of the "mad museum people and preservationists" whom the author disparages in the concluding paragraphs of his chapter on sea shanties (p. 104). But I read into his remarks a condescendingly agreeable tilt of the eyebrows toward a noble cause, for without such "mad" people the world would no longer have *Balclutha*, *Euterpe*, or *Cutty Sarkr*, nor the great *Victory*, *Warrior* and *Mary Rose* which so proudly represent the might of British ascendancy on the high seas.

Many large maritime museums in search of a diversified "multicultural" audience increasingly abandon the intellectual "high road" that drew us there in the first place. Exhibitions have become less intellectual in pursuit of the "blockbuster" and the "attraction." Publications have grown into slick "coffee-table" books with reduced space for text and proportionally less scholarly exposition. In this effort, too, Proctor's considerable

research seems compromised by a top-floor decision to offer to a broader but more shallow museum public a book which will not intimidate. He writes — or perhaps has been edited — as if his most important reader will be the first-time museum visitor, probably one with only a schoolroom education.

One example will suffice. Writing about the status of black slaves in America, Proctor reports: "Theirs was a life of great hardships, which only eased sometime after the end of the Civil War and the abolition of slavery." (p. 100) This simplistic fact is well-known but actually supports a convenient stereotype. In truth, the lives of many slaves worsened after they were freed, for want of steady jobs and accommodation formerly provided, at whatever meagre level, by the plantation owners. The complexity of the slavery system, the role of free black seamen and the relationship of African music to sea shanties can not be handily compartmentalized.

A much worse complaint is that the work contains errors in its exposition of basic maritime history. From an American perspective these errors are both unfortunate and often amusing. Thus, Proctor implies that the "Negro" shanties were picked up by American whalemen in the ports of the Deep South, when in fact whaling ships seldom if ever called into Gulf of Mexico ports such as Galveston, New Orleans or Mobile, (pp. 94-5) He also notes that American whaling persisted "well into the nineteenth century," when it in fact persisted — and that is the correct word until 1925. At the same point in the text Proctor refers to the American "Down Easters" as "great east coast trading schooners, such as were built at Bath." Any American maritime historian ought to have been able to explain that the "Down Easters" were not schooners. They were ships and barques — the ultimate expression of square-rigged merchant sail from American shipyards. There also are mentioned "the famous Blue Nose fishing schooners out of Gloucester," which remark surely will extract a chuckle from any taciturn Yankee, since the Bluenose schooners and the Gloucestermen were natural competitors for the Grand Banks codfish catch. The Gloucestermen hailed from the small seaports around Cape Ann to the north of Boston, Massachusetts, while the Bluenose men sailed from ports in neighbouring Nova Scotia, Canada!

Lazy errors abound: thus the author refers to the master mariner W.B. Whall (an important source for songs of the sea) as *KB*. Whall (p. 72); to the Alabama cotton port of Mobile as "Mobil" (p. 73); and to the well-known five-masted barque *Copenhagen*, without explanation, as the *Kobenhavn* (p. 75). Of course, Proctor is not expected to know ship histories as well as music, but a quick vetting of the typescript by a Greenwich maritime historian with an interest in sail presumably would have isolated such anomalies.

It is in the chapter on sea shanties where omissions and generalizations seem most jarring, but this may seem so because the reviewer knows more about the working songs of the sea than about Royal Marines bands or the music of bygone civilizations. In this matter I cannot imagine that Proctor has truly overlooked Stan Hugill's Shanties from the Seven Seas, which has been issued in at least four editions since its initial publication by Routledge and Regan Paul in 1961. In that book and another entitled Shanties and Sailors 'Songs, Hugill rather thoroughly covered much of the ground regarding the origin of working sea-songs and the shipboard use of shanties. Instead, Proctor directs readers only to Hugill's relatively minor work Songs of the Sea, which its author disdained as a publisher's coffee-table adaptation of his lifetime study of the days of sail.

Even some of the musical history is open to misinterpretation. His remarks about the concertina and accordion may illuminate the point: according to the American "free-reed" historian John Townley, as well as Walter Maurer, author of *Accordion: Handbuch eines Instruments, seiner historischen Entwicklung und seiner Literatur* (Wien: Edition Harmonia, 1983), prototypical harmonicas (mouth organs) and accordions were devel-

oped about 1830. The concertina, then called the "symphonium," was introduced in an 1829 patent issued to Sir Charles Wheatstone. Anything prior to that, if called a "concertina," must necessarily have been a different instrument. Yet Proctor refers without explication to "hexagonal wooden end-pieces of a concertina ornamented in silver" found among the artifacts from the *Trinidad Valencera*, wrecked off the Irish coast after the defeat of the Armada in 1588.

Elsewhere (p. 63) he notes instruments belonging to drowned Dutch sailors of the eighteenth century. Among them, he notes, "a lieutenant owned a flute and...others had accordions..." One must go to the endnotes to discover that the instrument list is drawn from an eighteenth-century ledger, while the note about the accordions — which by inference belongs also to the 1700s — was taken from a record which continues through to 1900.

The book is divided loosely among six chapters, beginning with the earliest notations of instruments taken to sea; the development of the formal marine band; the use of musicians and instruments on the main deck; sea songs and shanties; a chapter on music as a reliever of stress in the confines of the ship; and finally notes on orchestral music inspired by the sea. To their credit, the National Maritime Museum archivists have provided a wonderful assortment of photographs — of Royal Marines bands, informal ships' orchestras, individual players of folk instruments, and other depictions of shipboard musical life. The small size of the photographs makes it difficult to get "inside" the images to study the instruments or the men who are performing with such British hurrah.

Perhaps best of all are the wonderful quotations the author has extracted from a variety of sources which speak to the impact of music at sea, for in that place off the land is where music fills the heart of the professional sailor long from home, and the landsman's on his first voyage: "This evening there is life in the foc'sle....if you are lucky to have some voices on board there is great joy, and

you don't hear just sailor songs..." (p. 70)

Proctor faced the conundrum posed by written discussion of music: whether to include the relevant musical notation and thereby slow the reader who does not want to or cannot read it, or else leave the music out and mystify readers who do not know the tune in question. He omitted it, though in a few cases a couple of lines of melody and a verse of lyrics could have added considerable illumination.

Music of the Sea deserves a place in the marine library, together with previous works on the same subject by Stan Hugill, W.B. Whall, William Main Doerflinger, Roy Palmer's compilation for *The Oxford Book of Sea Songs* and others. It is not the sea-music book I would have written, but at least it derives from emotional sources close to the wellspring of life, the same sources from whence comes music itself.

Robert Lloyd Webb Phippsburg, Maine

Ian Jackson. *Sailor of Fortune*. Durham: Pentland Press, 1993. xvi + 290 pp., maps, photographs, tables. £15.95, cloth; ISBN 1-85821-022-4.

It is not unreasonable to assume that anyone who has spent forty years at sea and risen from apprentice to master, has sufficient material for a book. If that person has kept detailed records and written voluminous descriptive letters that have been preserved, so much the better. Such is the case with the central figure in this book, Captain Jack Amot. It fell to an idolizing nephew, Ian Jackson, to organize the "pistache" of material, as he himself describes it. In so doing it is quite obvious that kinship has influenced the selection for there is nothing that does not show the central figure in anything but the best light.

This is an interesting book and quite enjoyable to read, but not gripping as one might expect from the title. The early chapters

chronicle the experiences of Jack Arnot whilst serving his time on merchant ships. This is followed by a lengthy section (sixteen chapters) in which the author describes, in ponderous detail, how his uncle discovered and purchased a sixty-four foot yacht which, with one other person, he sailed to New Zealand. The remaining ten chapters are devoted to Arnot's service as master, first on small island-hopping cargo ships in the South Pacific, then rounding out his career in the same waters in command of two vessels owned by the London Missionary Society.

The author's stated purpose is to contrast the life of a seafarer in pre-war days to what it is at the present time. (p. xv) In doing this he draws heavily upon his own experiences. He too made the tortuous transition from apprentice to master. He too knew the rigid method of examining masters and mates and finds it a far cry from the relaxed format of today. He comments too on the lengthy periods the seafarer of the Thirties spent away from home and family in comparison with today's practice of generous leave and fly home vacations.

Such hardships were the lot of Jack Arnot who, except for one delivery job, served from 1923 until 1950 in two companies, eleven of these years on various Ellerman tramps in which he visited no less than 112 ports throughout the world. The balance of his merchant ship career was spent exclusively trading in the Indian Ocean on tankers owned by the Burmah Oil Company. Here the tours of duty were of three years' duration before being eligible for leave. Out of this service, which included the war years, the reader is treated to only one dramatic incident. In January 1931, whilst Arnot was serving as one of the Third Mates on the City of Delhi, his ship was diverted in the North Atlantic to tow another company vessel which had lost her propeller. The eight day tow from the Grand Banks to Halifax has all the drama one might expect to encounter under the circumstances. What part Third-Officer Arnot played in it is not revealed. In comparison with his

tramping days, Arnot's tanker career was notable only for its boredom.

The yachting interlude that followed was equally lacking in drama. The 14,285-mile voyage from England to New Zealand via the Panama Canal presented few problems for the veteran navigator. If anything is deserving of comment it is the fact that two unlike men succeeded in sharing the small craft without friction. At least, so we are led to believe.

The remainder of Arnot's career, spent in the South Pacific, is equally devoid of any worthwhile reportable incidents. Taking all of this into consideration, it is not unreasonable to conclude that the kindly disposed author selected his material with compassionate care.

The book has an attractive dust cover, is well presented and has an excellent selection of ship photographs, even if some, like the *Highland Monarch*, (p. 77) are only remotely connected with the central character. One can only hope that the author can recover his costs of having this book published. At the stated price, I very much doubt it.

Gregory P. Pritchard Lunenburg, Nova Scotia

G.S. Ritchie. *No Day Too Long - An Hydro-grapher's Tale*. Durham: Pent land Press, 1992. xiv + 250 pp., figures, photographs, index. £15.50, cloth; ISBN 1-872795-63-3.

This book describes the remarkable forty-year career of a hydrographer surveyor, from junior officer to the most senior post in the hydrographic service, the post of Hydrographer of the Royal Navy, first established in 1795; from 1966 to 1971, Admiral Ritchie was the nineteenth officer to hold that post. The book is written with great enthusiasm, both as regards the work of a sea surveyor and about life. The title is most apt; as an exsurveyor myself, I know how long the days at sea could be, particularly in the sounding boats. Yet, as the author notes here, there is also great personal satisfaction in the work, for there would be a permanent record in the

chart as a result of each surveyor's efforts.

During his time, the Royal Navy charted the world. Ritchie's efforts took him to uncharted waters in remote areas from Jamaica to Malaya to New Zealand and elsewhere. In World War II his major work was in the Mediterranean, following up the armies in port clearance in a three-ton truck with a three-man crew and a sounding boat, and in the sounding of Arromanches, Normandy during the invasion for the establishment of the Mulberry harbours. These were years of high adventure and the book sparkles with anecdotes and descriptions of many hilarious occasions. His Serene Highness, Prince Rainier of Monaco, wrote in his foreword that Steve Ritchie had great charisma, and I can certainly vouch for that and his sense of humour. He had the ability always to get the best out of his officers and men. He commanded four survey ships, including HMS Challenger and HMS Vidal, and they were happy ships despite being engaged in strenuous voyages and arduous duties for years on end. His longest voyage in Challenger was eighteen months on a scientific and hydrographic expedition world-wide. In the course of this, the ship achieved the deep sounding of 10,900 metres in the Marianas Trench in the western Pacific, still referred on the charts today as Challenger Deep.

In 1964 HMS *Vidal* went to Leningrad to establish liaison with the Russian hydrographic Service, and with the redoubtable Hydrographer of the Royal Navy, then Rear Admiral Sir E.G.G. Irving RN on board and with Ritchie in command, it was a highly successful visit. The ship's company brought *Vidal* home and alongside in Chatham — all wearing fur hats.

During Ritchie's post-war career surveying methods and equipment saw rapid advances. Electronic positioning (DECCA), deeper echo sounders and air guns for seismic profiling came into use. The book provides excellent and clear explanations on the new techniques and the heavy involvement of the surveying service in major scientific expedi-

tions in addition to hydrography.

In 1965 Ritchie brought Vidal into Chatham for the last time and rang off the main engines. He had commanded survey ships for eight years and was reluctant to leave — he was a sea surveyor, not a desk man. Nevertheless, in 1966, he was appointed Hydrographer of the Royal Navy. He immediately turned his attention to shore-side problems and requirements. These included developing automated data collection of hydrographic information, which was in some difficulty, particularly at sea in a survey ship in bad weather, and teething problems in computer-assisted charting procedures at the Hydrographic office. These were productive years for Ritchie, despite his dislike for the desk. Thus, through the efforts of Ritchie and the French and Belgian authorities, agreement was reached on finalizing a vessel separation scheme in the congested English Channel, where some seven hundred ships passed daily. This achievement alone has prevented many collisions. Ritchie also spent time during these years on visits to Commonwealth and foreign hydrographic offices promoting and encouraging new ideas and offering surveying courses at the RN Hydrographic School in England. Nevertheless, the chapter devoted to his tenure as Hydrographer is a slim one. He was a sea surveyor by profession, not a Whitehall bureaucrat.

After his retirement Ritchie became Director of the International Hydrographic Bureau (MB) in Monaco. The IHB was the brain-child of the Princes of Monaco in the late 1800s, and Prince Rainier maintains a keen interest in the organization. The work of the IHB is of a technical nature, standardizing worldwide charting in cooperation with international agencies. Ritchie spent ten years as its director before finally retiring in Scotland.

Hydrographer, explorer, scientist, captain of ships and seamen, and a most entertaining writer, I wish Steve and his family well.

Tom Irvine Nepean, Ontario

John Hannigan, Jan Drent and Oleg Shakov. Commercializing the Northern Sea Route: Implications for Future Development of Shipping Along the Mackenzie River. Occasional Paper No. 2; Ottawa: Research Centre for Canada and the Soviet Successor States, Carleton University, 1992. 49 pp., maps, tables, references, appendices. \$7.50, paper.

The Russians have, for over half a century, been able to use the ice-bound waters of the Northeast Passage for economic purposes. Should Canadians now be thinking of harnessing the Northwest Passage in the same sort of way? That is the question this clearly argued paper seeks to answer. The first thing to establish is the degree of success the Russians have achieved, but that is just the point at which the Russian sources fail the reader. Although a good deal has been written on the subject (mostly in Russian), it is not easy to piece together a coherent picture.

The writers of the paper, however, are as well informed as outsiders can be, and by careful reading of what is available have presented a picture which, though lacking in detail, must be reasonably close to the truth. The cause of the difficulty is evidently military security: the whole northern littoral of the Soviet Union was a prohibited area — a fact not published in the country itself, but known from the few westerners who were able to penetrate it. The object of the paper is to relate the Soviet activities to what goes on, or what might go on, in the Canadian Arctic, and especially on the Mackenzie River. This is where the argument becomes very interesting. There is a superficial similarity between the two Passages, but the differences, though less obvious, are often more significant. The parts played by the Mackenzie and the Lena might be a case in point. Our authors are of course well aware of this and are sober in their judgements. They conclude that there is a strong case for urging Canadian shipping interests to look at a number of specific factors concerned with, for instance, port facilities, use of particular types of ship, and

innovative trades linking the Mackenzie and the Russian Arctic.

This booklet covers ground not covered elsewhere, and it comes out at a moment in history when the chances of some positive action being taken are perhaps better than they have ever been. Norway and Japan, represented respectively by the Fridtjof Nansen Institute and the Ship and Ocean Foundation, have funded a major research effort called the International Northern Sea Route Project (INSROP), which is directed at determining whether commercializing the Northern Sea Route is workable and desirable. Some of the material which emerged from the meetings of the INSROP group has been utilised to good effect in the publication under review, which may therefore be regarded as a helpful adjunct to that effort.

> Terence Armstrong Cambridge, England

John Geiger and Owen Beattie. *Dead Silence: The Greatest Mystery in Arctic Discovery.* Toronto: Viking, 1993. xx + 219 pp., maps, photographs, illustrations, appendices, notes, sources, index. \$29.99, cloth; ISBN 0-670-84318-0.

Readers who appreciate restraint in the titles of historical works may raise their eyebrows at the subtitle of this book. Its publishers, however, felt that the name of James Knight was not likely to attract buyers; few people can be expected to take an interest in the fate of a man of whom they have never heard. (The title of the German edition is *Toten stille: Das tragische Schicksal der Knight-Expedition von 1719*, suggesting the disconcerting possibility that the Germans know more about our national history than we do.)

James Knight entered the service of the Hudson's Bay Company as a carpenter and shipwright in 1676, when he was around 30. A capable, energetic man, he rose to positions of importance both on the Bayside posts and in London; he was one of a handful of over-

seas administrators ever to gain a seat on the Company's Board. He is a figure well known only to fur trade historians, yet it is safe to say that he makes an indelible impression on anyone who encounters him. This is owing to three things: his peppery, self-confident character, his relationship with the Chipewyan woman, Thanadelthur (his admiration for her, which transcended the differences of race, sex and age, has made him something of a hero to feminist historians) and, perhaps above all, the manner of his death. In June 1719, when he was in his 70s, he sailed from Gravesend as the leader of an expedition consisting of two ships, the Albany and the Discovery, and forty men. Hoping to find the North-West passage, and the wealth of copper and gold of which Thanadelthur had told Knight, they were never seen again.

Perhaps the 1990s are to be James Knight's decade. Knight figures as a major and oddly endearing character in *Running West*, an enthralling novel by James Houston, published in 1989, about William Stewart and Thanadelthur. This book, together with a documentary film which is being planned, should do much more to raise Canadian awareness of Knight.

The book is handsomely produced, with seventeen colour photographs of the archaeological site and some of the findings, and numerous black and white illustrations of an historical nature (these last, unfortunately, are not credited). A brilliant touch is the whimsical dragon which embellishes the title page and floats at the end of each chapter. This is taken from the two dragons which adorn the title page of the York Factory post journal for 1714-1715; perhaps the clerk who drew them had been bedazzled by Governor Knight's tales of the riches of the Orient.

Dead Silence operates on several levels, and it is a lively and entertaining read on all of them. It is a thoroughly researched account of what is known of Knight's life from primary and secondary sources, and there can be no better testimony to its merits on this score than the fact that Glyndwr Williams has

written the preface. It also considers the explanations previously advanced as to what happened to Knight and his men and the reasons underlying these explanations. It was assumed that the expedition was shipwrecked on Marble Island (more precisely, Quartzite Island, one of the Marble Island group in Hudson Bay). There the men were either killed by Eskimos or perished, miserably but bravely, of starvation and exposure. And finally, it recounts Owen Beattie's four seasons of land and underwater archaeological investigations on Marble Island, which began in 1989, and fits them into the story.

Since the book is billed as a mystery, it would be a critical solecism to reveal the conclusions reached by Beattie and Geiger. But perhaps it would be in order to indicate that they, like searchers in previous centuries, found a good deal — from the *Albany* and *Discovery* themselves to the hut built by the members of the expedition to the sad personal relics such as shoes and a pair of brass dividers. They also found graves — whaler's graves, Inuit graves, Thule graves — but, when came to seafaring subjects of King George, not enough human remains were found to make up a small ship's boy.

Perhaps the greatest achievement of the book is that it helps us to understand why Knight is such a compelling figure. He is presented as one of those individuals who stood for more than himself—as a symbol of his own time and place, when Britain reached out with both hands to take what the world had to offer, and as one of the first of the great Canadian crazies. We see Knight not as the forerunner of officers and gentlemen like Franklin but of men like Strathcona and Sir Harry Oakes, dreaming in the bush of Eldorado. If the title had not already been used by a recent novel on eighteenth-century British commercial enterprise, this book could have been called Sacred Hunger.

Anne Morton Winnipeg, Manitoba

Emile Frederic de Bray; William Barr (trans. & ed.). *A Frenchman In Search of Franklin: De Bray's Arctic Journal 1852-1854*. Toronto: University of Toronto Press, 1992. xxii + 339 pp., photographs, illustrations, maps, appendices, notes, bibliography, index. \$35, cloth; ISBN 0-8020-2813-6.

Emile Frederic de Bray is hardly a household name; even in the annals of Arctic exploration, the French *enseigne-de-vaisseau* is but a shadowy figure. Yet important writings need not always flow from the pens of famous people, as *A Frenchman in Search of Franklin* illustrates. De Bray came to the Arctic by petitioning the British government to join in the search for the lost Franklin expedition. He ventured north aboard *Resolute* in 1852, part of Edward Belcher's searching expedition.

At one level, it would seem that there is little more to be said about the massive search for the Franklin expedition. There have been countless books written about this well-known episode in Arctic exploration, and most of the diaries and journals documenting the search have appeared in print. There appears to be an inexhaustible demand for ever more books on the topic. In this limited context, then, the arrival of the never before published journal of de Bray is an important event.

The significance of A Frenchman in Search of Franklin rests elsewhere than in the contribution to the well-covered field of Franklin studies. (Part of me, I must admit, would just as soon not ever again read an account of the search for Franklin.) The fact that de Bray was French gives the book a different twist — one noted by one of his shipmates, Lieutenant George Nares, who observed "The Frenchman does not seem an Englishman, but I suppose he will improve on acquaintance." (pp. ix) One should not expect, however, that de Bray's account is filled with analysis of the English; rather, it is a fairly standard description of the sights and experiences of the Canadian Arctic. It is the humble, matter-of-fact tone of the descriptions that gives the book its particular utility. This

is not a volume of stirring narrative or evocative phrasing, but that does not mean it is uninteresting. It is the every-day descriptions — from the theatrical performances to the manner of dealing with extreme cold — that give de Bray's accounts both a less than heroic cast and a greater than normal degree of authenticity.

William Barr's work is familiar to most northern scholars, for he has published extensively in this field. Many readers will not, therefore, be surprised to learn that this volume is a fine example of the editor's craft. The introduction and postscript provide the narrative and personal details necessary for the reader to make proper sense of the journal; there is enough information on the Franklin episode to provide necessary context, and considerable detail on de Bray's career. Moreover, the careful annotations, reflecting Barr's deep familiarity with the details of the Franklin searching expeditions, provide invaluable additions to the text. The editor has, as well, included a variety of de Bray's sketches and hand-drawn maps, as well as several general maps of the central Arctic - essential elements for the understanding of explorers' movements and descriptions.

De Bray's account, although not the best of the numerous descriptions of Arctic exploration, deserves a wide readership. A Frenchman in Search of Franklin provides a fine, first-person account of Arctic navigation in the 1850s. That de Bray himself was, until the appearance of this book, virtually invisible on the historical landscape also provides further confirmation of the fundamental importance of publication as a means of establishing a place in history. Many lesser men, and lesser writers, have had a long-standing place in our understanding of the past, primarily by virtue of the public release of their journal, diary or memoirs. The long-forgotten Frenchman will now, thanks to the efforts of William Barr, take his place among those nineteenth century adventurers who sought - in the interests of science, out of concern for fellow mariners, and a desire for personal challenge - to

unlock the mysteries of the Arctic.

Ken Coates Prince George, British Columbia

Aurel and Arthur Krause; trans. Margot Krause McCaffrey. *To the Chukchi Peninsula and to the Tlingit Indians 1881/1882. Journals and Letters by Aurel and Arthur Krause.* Rasmuson Library Historical Translation Series, Vol. VIII; Fairbanks: University of Alaska, 1993. xiii + 230 pp., photographs, illustrations, maps, appendix, endnotes. US \$17.50, paper; ISBN 0-912006-66-8.

In 1881, the Geographical Society of Bremen appointed Aurel and Arthur Krause, teachers of the natural sciences in Berlin, to carry out its third research project — a scientific ethnological expedition to the Bering coasts of the Chukchi Peninsula and to the southeastern coasts of Alaska. For more than a year the brothers collected geographical, geological, botanical and zoological data in these largely unknown areas. More important, they compiled invaluable information about the indigenous inhabitants, their forms of social and economic organization, and their cultures.

The results of the expedition became widely known through lectures and extensive publications. Although the Krauses were not anthropologists, their ethnological data was very highly regarded. As Ema Gunther has observed, many accounts of indigenous societies focused on the unusual and the exotic. The Krauses' work was so valuable because it did not. Their scientific training had made the brothers keen observers who collected and compiled information systematically; this was their hallmark. Among their published materials, the best known is Aurel's *Die Tlinkit-Indianer* (Jena, **1885)**, still a seminal study, unsurpassed in its scope.

Missing from these accounts, however, is the personal dimension of the expedition the events of discovery, exploration and observation, both routine and unexpected, from which the brothers extracted their data. This is the gap filled by To the Chukchi Peninsula and to the Tlingit Indians 1881/1882: Journals and Letters by Aurel and Arthur Krause, a translation by Aurel Krause's granddaughter of an unpublished, revised edition of Zur Tschuktschen-Halbinsel und zu den Tlinkit-Indianern 1881/1882.

This book recounts the brothers' travels from Germany to New York, then by train across North America; their voyage from San Francisco to the Chukchi Peninsula and back; the trip to Alaska and the winter stay at Chilkoot; and their separation in the spring of 1882 and return home. Aurel's journal forms the core of the account; gaps are filled by personal and professional letters and reports. Skilful compilation and editing enhance the "story" contained in the documents. The only technical defect is the lack of an index.

The logistical difficulties in exploring remote and hostile regions have been enormous. For the Krauses, danger and physical hardship were frequent companions whose presence they calmly accepted. The circumstances that disturbed them were far more prosaic: snarls in travel plans, bad weather, lost or damaged equipment or specimens. On the whole, however, they met the challenges and mishaps of their adventure with aplomb and good humour, as Arthur's description of walking in snowshoes will confirm.

The documents used here were only peripherally related to the Krauses' later scientific and ethnographic work, but the connection is clear. The descriptions of northern landscapes and their plant and animal inhabitants are striking and sometimes poetic. The fit between native crafts and implements, survival in an unforgiving environment, and indigenous beliefs and cultural traditions is a recurring theme, as is the relationship between subsistence and maritime resources that circumscribed past economic organization and would govern future economic development.

The Krauses observed the consequences for indigenous groups of the northern Pacific rim — not only Chukchi and Tlingit — of increasing contact with the modern world, the

particular economic and social problems of alcohol, and the differing administrative strategies employed by Russian and American agencies in the region. They noted similar perceptions of unseen reality held by the indigenous peoples of both Asia and America, as well as the successes and failures of Christianity in penetrating and changing permanently indigenous cultures.

This volume does not compare with the Krauses' formal scientific and ethnographic work, nor should it — for its contribution is very different. It recalls the patient and painstaking work upon which the search for knowledge has been built.

Judith Bruce Berkeley, California

Glynn Barratt. *Russia and the South Pacific,* 1696-1840, *Volume IV: The Tuamotu Islands and Tahiti.* Vancouver: University of British Columbia Press, 1992. xvii + 298 pp., maps, tables, illustrations, appendix, notes, bibliography, indices. \$75, cloth; ISBN 0-7748-0409-2.

The author is a Professor of Russian at Carleton University in Ottawa, and if the quality of his footnoting and general knowledge of the sea is anything to go by, he is as much a well-informed naval historian as he is a scholar in the Russian language. This book is the fourth in a series which present, through translated documents, the extraordinary record of Russian exploration in the South Pacific or rather, the Russian investigation of island groups or watery wastes others had "discovered." It focuses on the expeditions to Tahiti and the Tuamotu Archipelago to the northeastward, beginning with those of Von Kotzebue, who visited Polynesia in the ship Riurik in 1816, and Bellinghausen, in company with Lazarev in the ships Vostok and Mirnvi in 1820.

Barratt's approach is to provide a detailed historical summary of the voyages, astonishing for their scholarly detail and evident mastery of the overall picture of Pacific

history, and then the transformation of the key journals of the voyages. He also provides material from later return voyages of Von Kotzebue and others, and photographs of ethnological specimens collected by the Russians which Barratt tracked down in their modern locations. Detailed tables summarize the activities of Russian vessels in Polynesian waters from 1816 to 1840, and enhance Barratt's clear and concise presentation of the surprising Russian record of achievement in the South Pacific, surprising only because we tend to see Pacific exploration as the accomplishment of the Dutch, Spanish, French, and above all, British. Very quickly we realize that the Russian voyages were well-planned, methodically carried out, and professional in manner. The effect is to suggest a navy far more competent at its work than the seemingly inept one battered into defeat by the Japanese early in the next century. The officers and expedition leaders were civilized and humane men whose observations are of value to anyone on the track of historical or ethnological material on Tahiti and Polynesia. The Tahiti visited by the Russians was not that known to Cook or Bligh, a sailors' paradise of dissipation "beyond anything that can be conceived." Rather, it was in the apparently iron grip of the London Missionary Society, whose profitable and pervasive imposition of a humourless and repressive Christianity and hard-fisted plantation capitalism on the gentle Tahitians caused Von Kotzebue, for one, to become angry at what he thought he saw:

The religion taught by the missionaries is not true Christianity, though it may possibly comprehend some of its doctrines, but half understood even by the teachers themselves. That it was established by force, is of itself evidence against its Christian principle. A religion which consists in the eternal repetition of prescribed prayers, which forbids every innocent pleasure, and cramps or annihilates every mental power, is a

libel on the divine Founder of Christianity... (p. 122)

For Western readers accustomed to assume a certain societal superiority over Russians, past and present, the sensitive liberality and sophistication of the Russian minds seen in these journals is a welcome lesson. For students of maritime history the true value of this volume lies less with the indignant objections of the Russians to the real or imagined plight of Tahitians than in the record of careful navigation and observation by the Russian vessels and their crews. The story of the "opening" of the Pacific is not merely a Western European one, and Barratt's superbly detailed scholarship goes far in making that clear.

Victor Suthren Ottawa, Ontario

Philip F. Rehbock (ed.). At Sea with the Scientifics: The Challenger Letters of Joseph Matkin. Honolulu: University of Hawaii Press, 1992. xiv + 415 pp., illustrations, photographs, appendices, notes, selected bibliography, index. US \$38, cloth; ISBN 0-8248-1424-X.

The voyage of HMS *Challenger* was the largest and one of the most significant naval-scientific expeditions of the nineteenth century; data from its 1872-76 circumnavigation helped found the science of oceanography. Until now, primary documentation of the *Challenger* expedition consisted entirely of material written by its officers and civilian scientists; Professor Rehbock has had the enviable task of editing a recently-discovered collection of manuscripts written "below decks." For the first time, in the letters of steward's assistant Joseph Matkin, we have a record of the experience and perceptions of *Challenger's* crew.

Matkin wrote for members of his family in the style typical of Victorian travelogues, with background information, poetry quota-

tions, and extensive commentary included to make the letters instructive as well as informative. Rehbock presents the letters with minimal editorial intrusion, in chronological order, allowing the voyage narrative to develop along with Matkin's articulate style. One of the most remarkable features of the letters was Matkin's position as a "middleman," belonging neither to wardroom nor forecastle. His position required literacy, and gave Matkin access to writing materials and some measure of privacy, distinctions which set him apart from the sailors he observed, rather than befriended. Likewise, although he visited the laboratories, and made efforts to understand the scientific purpose of the voyage, his place was definitely below decks.

While Rehbock's restrained approach to the letters is justified by their coherent and remarkably accurate content, there are places where additional or more comprehensive notes would have been helpful. For example, Matkin often noted the healthy state of Challenger's crew, telling us about regular issues of lime juice to prevent scurvy and the consumption of fresh meat and vegetables in port. To highlight the progress made in these matters since the previous century, Matkin claimed several times — that Captain Cook's crews had been decimated by scurvy. Such inaccuracy deserves comment: it is rare to find criticism of Cook in nineteenth-century naval writing, especially in accounts of the long-range scientific expeditions which owed so much to his example. Matkin's remarks are the more surprising when we learn that he had access to Cook's published reports in Challenger's library; evidently his desire to praise nineteenth-century "progress" overruled his knowledge of Cook's successful battle against shipboard disease.

Although Rehbock notes Matkin's relatively broad-minded view of "natives," the letters actually contain something more significant: Matkin's opinion of Britain's overseas role. His accounts of the British colonies *Challenger* visited, and detailed descriptions of non-European peoples, invite analysis.

Matkin, a steward's boy in the merchant marine, had lived for a year in Australia before returning to England to join the Royal Navy in 1870, and was delighted to visit Melbourne again during *Challenger's* cruise. His favourable, often patriotic accounts of British colonial societies (which he contrasts with those of other European countries), remind us that *Challenger's* voyage took place on the cusp of British imperialism, between the restrained approach of earlier years and the more aggressive policies of the late nineteenth-century.

When Matkin wrote about Challenger's meeting with HMS *Pearl* in 1874, just after the latter had supervised the annexation of Fiji, he stated that one of the Australian colonies would have claimed Fiji if Britain had not. This was an astute assessment of what is now called "sub-imperialism," an acknowledgement that British colonies were often active partners in the extension of empire. Matkin's comments about this, joined with his confidence in Britain's scientific progress in the age of steam, give us new insight into the relationship of science to empire. Challenger's track chart shows us how much of the globe could already be covered by travel between British ports; her voyage was both a witness and an affirmation of Britain's growing imperial confidence.

> Jane Samson London, England

Paul Stillwell (gen. ed.). *Naval History, Volume 6, Numbers 1-4, 1992.* Annapolis: Naval Institute Press, 1993. 4x80 pp., photographs, maps, figures, tables. Cdn \$33.95, US \$24.95, cloth; ISBN 1-55750-606-X.

Most readers of *The Northern Mariner* will already be familiar with the US Naval Institute's excellent quarterly, *Naval History*. In this volume, the four issues comprising Volume 6 (1992) have been conveniently and handsomely-bound.

Each issue of Naval History contains

eighty pages of informative, interesting material, including five or six feature articles, oral history interviews, technical reports, book reviews, naval museum display information and readers' letters and comments. The periodical is profusely illustrated with fascinating and often unusual photographs and artwork (in full colour) as well as diagrams and maps.

Clearly, however, Naval History is the product of — and is directed at — members of the US Naval community and historians interested in the US Navy. Indeed, the subscription coupon included in every issue states the magazine is "devoted to our nation's rich naval heritage." This is perhaps especially true of these particular issues, with their numerous features celebrating the fiftieth anniversary of critical World War II naval actions in the Pacific such as the Battles of the Coral Sea. Midway and Guadalcanal. Many contributors are themselves former American naval officers. Nevertheless, a variety still exists in terms of periodization, subject matter and method of historical analysis. Readers of Volume 6 can find articles on such diverse topics as "Naval Discipline in the 1850's," "The Case for Captain Lord" (of the SS Californian at the scene of the Titanic disaster), "The Romance of the Subchasers," "The Quasi-War with France" and a study of the Joint Chiefs of Staff during the Cuban Missile Crisis. "How Well did the JCS Work?" The US Marine Corps and the US Civil War are also frequently covered themes. All articles are well written and are not overlong. The same is true for the book reviews, which detail works concerned with all aspects of naval and maritime history. A useful comprehensive annual index covering the previous year's content is published in the first issue (Spring) of every volume.

Subscriptions to *Naval History* cost US \$20 for non-USNI members plus \$4 for shipping. It is a top-quality periodical well worth the price.

Serge Durflinger Verdun, Queoec

John H. Pryor. *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean 649-1571*. New York: Cambridge University Press, 1988, 1992. xxii + 238 pp., maps, figures, bibliography, index. US \$16.95, paper; ISBN 0-521-42892-0.

This book consists of essays on the factors affecting the growth of trade and influence in the Mediterranean from the seventh to the sixteenth centuries A.D. The essays are connected by common themes; the fluctuating fortunes of the Christian and Muslim states in their attempts to dominate the sea; the effect of natural forces like winds, currents, weather and topography; and the influence of changing technology on ship design and construction, and on navigational techniques. Pryor discusses these themes separately, but suggests that there was no single causal agent for the final outcome. Instead, a whole range of interdependent factors contributed to the end result. The narrative has continuity, but is in no sense a complete maritime history of the Mediterranean in this period.

The first three chapters discuss the setting and background, the sea and weather patterns, the development of various types of merchant vessels and warships, the routes used by mariners, and navigational difficulties. Later chapters review the maritime activities in the Mediterranean in a chronological sequence, and consider particular problems, such as guerre de course.

Pryor draws on a wide range of sources. These include period manuscripts from archives in Italy, Spain and France, the results from maritime archaeology of the past forty years, and several hundred printed sources, many from the countries bordering the Mediterranean. A scarcity of primary Muslim sources is due to both the difficulty of gaining access to the archives of the Muslim states and the problem of finding a scholar interested in the subject and able to read Arabic.

The book is splendidly detailed and thorough, although in a number of places, for example in the summaries of the times taken for voyages between ports, a tabulation would be easier to follow than several pages of descriptive matter. Each chapter is well organized internally, and the sequence ties the various themes together well. Special emphasis is placed on the development of welldefined "trunk" routes, along which most voyages were made, on the influence of natural forces in determining these routes, and on the limitations imposed by the capabilities of the various types of ship used. The importance of secure advanced bases for both merchant vessels and war galleys is noted as a critical requirement for success in both trade and war.

The factors which allowed the Christian powers to dominate the area at some periods, and the Muslims to dominate it at others are explored in detail. Well-documented arguments are put forward against some traditional explanations.

Overall this is an excellent book, and essential to any scholar working in this period and area. It would also be of great interest to the layman and amateur historian who desires something more than just a general overview of the maritime history of the Mediterranean in the Medieval period.

R.J.O. Millar Vancouver, British Columbia

Eira Karppinen, (ed.). *The War of King Gustavus III and Naval Battles of Ruotsinsalmi*. Kotka, Finland: Provincial Museum of Kymenlaakso, 1993 [order from the museum, Kotkankatu 13, FIN-48100, Kotka, Finland]. 144 pp., figures, maps, photographs. FIM 50, paper; ISBN 951-96183-5-X.

Stewart P. Oakley. *War and Peace in the Baltic, 1560-1790.* London and New York: Routledge, 1992. xvii+222 pp., maps, genealogical tables, chronology of events, notes and references, bibliography, index. US \$59.95, cloth; ISBN 0-415-02472-2.

1990 marked the bicentennial of the naval battles of Ruotsinsalmi fought against the

Russians near Kotka, Finland in 1789 and 1790. Though the first battle was indecisive, the second was the greatest victory in the annals of the Swedish navy. Nevertheless, and despite the terrible losses suffered by his enemies, King Gustavus III was not victorious in the war. When the adversaries made peace later that year, Ruotsinsalmi produced no change in the status quo in the eastern Baltic.

Now, the Kymenlaakso Museum has published a volume containing thirteen papers presented at the eighth International Baltic Seminar (1990). The papers have a cohesiveness seldom found in conference volumes. Anyone interested in the eighteenth-century Russian-Swedish struggle for supremacy in the eastern Baltic will find much of value in this volume.

In an essay on "The Foreign Policy of Gustavus III and the Navy as an Instrument of that Policy," Stockholm University professor Jan Glete provides a useful introduction which presents the Swedish monarch's plan to surprise Russia in a "quick and cheap victory." His newly constructed fleet of modern design but of inferior materials convinced the rash king to provoke war after the Turks attacked the Russians in 1787. Glete maintains that Gustavus could not direct and coordinate land, amphibious, and naval operations sufficiently to surprise the preoccupied Empress Catherine II. Nonetheless, his failure as a commander "was suddenly turned into a success" in the glory of the second battle of Ruotsinsalmi.

Contributions by Vladimir Samoilov and Lars Otto Berg describe the development of the Russian and Swedish fleets prior to the conflict. Particularly interesting is Berg's account describing the innovations that led to the Swedish construction of "archipelago frigates," armed with swivel guns, and the "gun boat fleet," specifically designed for amphibious operations. Peter von Busch and Anatoli Belik, of the Karlskrona Maritime Museum and the St. Petersburg Naval Museum, address the problems of recruitment and manning in the two fleets. Belik provides a rare glimpse into the huge task Russia

encountered in training both men and officers in a nation so devoid of maritime resource.

Vuorenmaa Helsinki historian Ansii presents an overview of operations of the war. He judges the struggle for Finland "a draw" because the Turkish war prevented Russia from deploying a larger force, and Sweden's "tactical victories" had no "larger significance" on the outcome of the war. Erik Withol describes the actual engagements at both battles at Ruotsinsalmi; he questions the "greatness" of the last battle and the worthiness of the policy that led to such slaughter in a cause so inconclusive. Estonian military historian Mati Oun completes the operational picture with a description of naval actions at Tallinn and other areas along the Estonian coast in 1788-1790. Ulla Riitta Kauppi of the National Board of Antiquities in Helsinki finishes this section of the volume with a very illuminating analysis of the consequences of the war, featuring the massive construction of fortifications by the Russians in southeastern Finland, the better to defend themselves.

Four additional articles are not represented in the title. All are devoted to marine archaeology, which was the subject of the final session of the Baltic Seminar. These are hidden treasures for those wishing to sample the study of ships wrecked in various parts of the Baltic during the seventeenth and eighteenth centuries. They include papers by Pryzemyslav Smolarek of the Polish Maritime Museum on a wreck in the Bay of Gdansk, Velio Mass of the Estonian Maritime Museum on Russian and Swedish wrecks in Estonian waters, Britt-Marie Petersen of the University of Stockholm on the wreck of the ship Anna Maria, and Flemming Rieck of the Danish Maritime Archaeology Institute on a shipwreck in Danish waters.

Readers wishing to improve their understanding of the larger context of war and diplomacy in the Baltic should consult the recent volume in Routledge's "War in Context" series, *War and Peace in the Baltic, 1560-1790* by Stewart Oakley. He traces the rise of Sweden to supremacy in the seven-

teenth century and its decline in the struggle with Russia, first under Peter I and finally under Catherine II. Interestingly, Oakley ends his work in 1790 with the second battle of Ruotsinsalmi. This is a much-needed synthesis and readers familiar with the poor quality of English-language works on this subject will be grateful to Oakley for consigning Jill Lisk's *The Struggle for Supremacy in Baltic 1600-1725* (New York, 1968) to the back shelf. For those who find the lack of documentation in many of the articles in the Baltic Seminar collection disturbing, Oakley's book provides excellent footnote references and a very complete bibliography.

Richard H. Warner Fredericksburg, Virginia

Greg Dening. *Mr. Bligh's Bad Language: Passion, Power and Theatre on the Bounty.* Cambridge & NY: Cambridge University Press, 1992. xii + 445 pp., figures, illustrations, bibliography, index. US \$34.95, cloth; ISBN 0-521-38370-6.

With all of the books and films about Captain William Bligh, the mutiny aboard HMS Bounty, and the subsequent voyages to track down Fletcher Christian's mutineers and to convey breadfruit trees to the West Indies. one might wonder why Greg Dening would add yet another lengthy study on these topics. However, after only a short time with Mr. Bligh s Bad Language, readers will recognize that this is a truly major historical work that transcends Bligh and the Bounty voyage to confront much broader historical questions analysis. interpretation. involving research. For those acquainted with Dening's earlier published work, this elegant, provocative, lucid, and challenging study marks a new apogee in the career of a gifted historian of the Pacific world. Organized around three acts as in a theatrical drama, "The Ship," "The Beach," and "The Island," Dening expands upon each theme to neat a whole range of subjects concerning the mutiny, European

exploration, and the responses of native societies. To match his ethnographical forays into native customs, symbols, and religious culture, in Act One Dening confronts and will surprise readers with parallel approaches to unravel the complexities of British naval discipline, customs, punishments, service, sacrifice, and language. In comparing customs, habits, and ceremonials with more exotic and sometimes shocking native rituals, he compels his readers to view naval culture in a new light. The barbaric incarceration, court-martial, and selective executions of Bounty mutineers — innocent and guilty alike — assume new meanings when compared with Tahitian rituals and their sacrifice of unfortunate human victims.

Popular views about the Bounty mutiny focus upon Bligh's arbitrary behaviour, violence, and the harsh discipline of the lash. In fact. Dening shows that compared with many British and American captains of the period, Bligh was quite moderate in his employment of corporal punishment. On his third voyage, James Cook flogged thirty-seven percent of his crew and the sedulous George Vancouver received the dubious title as leading flogger of early Pacific exploration, whipping forty-five percent of his men. In his own assessment of the *Bounty* mutiny, Bligh blamed Tahitian promiscuity that infected his crew with lust during five months of sedentary unemployment at Matavai Bay. Bligh's own origins from the ranks made him a perpetual outsider within the navy and possibly lowered the respect that seamen normally accorded to officers considered to be gentlemen. As purser aboard Bounty, Bligh was blamed for bad rations, miserly behaviour, and other deficiencies. His curses and petty harassments exacerbated what was a none too happy situation. Eventually, a complex brew of causative elements provoked what was an illconceived mutiny.

In Act Two, Dening moves away from the *Bounty* to consider the reputations of Captains Samuel Wallis of HMS *Dolphin* who commanded the first European expedition to

visit Tahiti and James Cook who left an indelible mark upon all subsequent explorers including Bligh. Wallis arrived at Tahiti in June 1767, possibly assuming the role of the Tahitian god Oro, but misunderstandings or miscommunications produced gun fire that killed many natives. On the third voyage, Cook was exhausted, sick, and often at odds with his men by the time they reached Hawaii. Receiving Cook as the god Lono, at first the Hawaiians gave the British everything they wanted. Unfortunately, the unscheduled return of the British ships that did not fit into Hawaiian chronology, precipitated violence and led to Cook's murder. Although the evidence on these first native responses to Europeans is sparse — mostly perceived through the cloudy lenses and distorted images of European accounts — Dening offers intriguing explanations. Both sides performed their mutually misunderstood rituals — the English with their possession taking, flag raising and sacraments; the natives with their own ceremonies, sacrifices, and offerings. Gradually, the Tahitians incorporated symbols from the British such as flags and banners, and later they took advantage of the Bounty mutineers to gain the upper hand in their own political struggles.

Those Bounty mutineers apprehended at Tahiti suffered the horrors of incarceration, shipwreck, and a second epic small boat voyage following that of Bligh's men before the survivors faced naval justice in London. Fletcher Christian pursued a lead from a copy of John Hawksworth's published Voyages about Captain Philip Carteret's 1767 discovery of uninhabited Pitcaim Island. Nine mutineers, six native men, twelve women and a baby girl made it to Pitcairn and an ugly future that consumed many of their lives in murderous struggles over the women and limited land. Perhaps at times, Dening waxes a little too eloquent in his conclusions that lack the basis of adequate evidence. Occasionally, his rich narrative and convincing arguments become slightly introverted, personalized, and precocious. The latter sections

examining the *Bounty* plays and more recently the films about the mutiny appear a little anticlimactic when compared with the powerful ideas expressed earlier. But this is most probably a matter of taste depending upon the interests of different readers. Dening is an absolute master at constructing and deconstructing the kind of historical problem produced by an event such as a mutiny. This study will exert significant impact not only upon future research on the Pacific Ocean explorers and their relations with native societies, but on historians and historical interpretation in general.

Christon I. Archer Calgary, Alberta

Francois et Anglais en Mediterranee de la Revolution francaise a l'independence de la Grece (1789-1830). Hies Journdes francobritanniques d'histoire de la marine, Toulon, 14-16 novembre, 1990; Vincennes: Service historique de la Marine, 1992. 330 pp., maps, tables. 130 FF, paper.

Although wars between France and Great Britain often began over conflicts in the Low Countries or the colonies, major naval campaigns took place in the Mediterranean. The British Admiralty needed to contain the French fleet at Toulon, while France sought to use this force to counter British superiority in the Atlantic. This book examines the Mediterranean as a theatre of operations for both navies at the end of the age of sail. The timeframe 1789-1830 includes the long struggle between Britain and Revolutionary/Napoleonic France, as well as the succeeding period of realignment which saw the former enemies participate as naval allies in the War of Greek Independence.

This collection of essays, ten written in French and eleven in English, is the proceedings of a colloquium held at Toulon in 1990, which brought together prominent French and anglophone naval historians. Although it restricted participants to papers dealing with

a single theatre during a specific period, the book covers a wide range of themes and topics. Two papers examine the British occupation of Toulon in 1793, while two address the Egyptian Campaign of 1798. The French navy's efforts to rescue Bonaparte's army from Egypt, and the British counter-measures, are the subject of two essays. Two authors question historical assumptions regarding grand strategy in the Mediterranean. Three papers deal with developments after 1815, the most interesting being Michele Battesti's discussion of the Battle of Navarino (1827). Although the collection concentrates on the British and French navies, it also includes an analysis of American prizes taken by French privateers and an examination of the origins of the US Navy's Mediterranean squadron.

Although several papers deal with naval operations in the broadest sense, perhaps the book's most prominent theme is the critical importance of logistics which has too often been neglected in traditional naval history. Jean Meyer surveys the conflict between the rival logistical systems in the Mediterranean during the Revolutionary and Napoleonic Wars, stressing the fragility of the French navy and the logistical difficulties facing the British far from home ports. These points are echoed in other papers, notably Roger Morriss' study on maintaining the British fleet and Christian Buchet's essay on the preparations for the Egyptian expedition. The development of wartime naval bases, both dockyard facilities and fleet anchorages, is the subject of three authors. The collection's focus on logistics also includes a discussion of the British hunt for timber in the Adriatic and an extensive list of Mediterranean-built prizes taken into the Royal Navy.

The essays within this collection vary in the quality and significance of their scholarship. Some represent valuable contributions to Anglo-French naval historiography. Others, such as Anthony Sainsbury's paper on Duckworth and the capture of Minorca, are merely anecdotal. There are disappointingly few comparative studies: Meyer's piece and Brian Tunstall's posthumous account of the tactics at the Battle of the Nile, presented by Nicholas Tracy, the editor of Tunstall's massive study, are notable exceptions. Furthermore, the book reveals little archival study of the Royal Navy by French scholars or attention to the French navy by anglophone historians. Nevertheless, for bilingual readers, this collection illustrates the direction of recent scholarship and provides both French and British perspectives on the naval history of the Mediterranean during a critical period.

William S. Cormack Kingston, Ontario

Emanuel Raymond Lewis. *Seacoast Fortifications of the United States: An Introductory History*. Annapolis, MD: Naval Institute Press, 1970, 1979, 1993. xiii + 145 pp., photographs, illustrations, maps, select bibliography, appendix, index. Cdn \$21.95, US \$15.95, paper; ISBN 1-55750-502-0. Canadian distributor, Vanwell Publishing, St. Catharines, Ont.

This is an extraordinarily interesting book. It is also a very important one, as Brigadier General James L. Collins, the US Army's Chief of Military History, points out in his Foreword. He claims that *Seacoast Fortifications* "revived interest in a long-forgotten element of military preparedness which had been very near the core of our national defense philosophy throughout most of our history [and] strongly influenced historical preservation activities in this country." (p. xiii)

That the book reached a large readership certainly cannot be doubted. First published by the Smithsonian Institution Press in 1970, this is its seventh printing. The navy's coastal defence role was well documented prior to its publication, but that of the army had been "almost totally neglected in both historical and technical literature, despite the fact that the fortifying of harbors in this country was carried out almost continuously for a century and a half and was an important and at times

a central element in American military policy." (p. ix) Lewis believes that "to the extent that this nation has an enduring heritage of military architecture, it is to be found along the coasts, in the vicinity of some of our most populous and important cities." (p. x)

This book does not examine the foreign or defence policies that led to the construction of the coastal fortifications. Rather, it briefly surveys their history, emphasizing the evolution of their architecture and armament. Basically, it deals with the characteristics of what Lewis describes as "the several generations of defensive works," with the interrelationships of fortification design, and the nature of weapon technology at various periods.

The construction of coastal defence fortifications in the United States began in 1794 and continued until the end of World War II. This parallels the situation in the British colonies to the north which later formed the Dominion of Canada. Their underlying principle was the superiority of guns ashore over guns afloat, a principle that remained essentially unchallenged until World War II, when the appearance of radically new forms of weaponry such as nuclear explosives and guided missiles rendered coastal fortifications largely obsolete.

The system of coastal fortifications was also based on the idea of occasional local defence based on the militia. A battery of a few guns could be manned by the local populace in the event of danger from the sea and could be left idle and unmanned except for purposes of maintenance until needed. It was also economical in the sense that, once constructed and equipped, it required practically no personnel in peacetime and few in wartime. Needless to say, the need to respond to the technological advances of the later nineteenth and twentieth centuries changed this situation, as the enormous, elaborate and expensive networks of forts built to protect the major ports, including those at Halifax, clearly demonstrated.

Seacoast Fortifications remains, almost a quarter century after its original publication,

the definitive text on the subject. Those interested in the related history of Canadian coastal defensive fortifications will find much of value here as well with respect to philosophy, design, and armament.

Brian Douglas Tennyson Sydney, Nova Scotia

David F. Long. "Mad Jack": The Biography of Captain John Percival, USN, 1779-1862. Westport, CT: Greenwood Press, 1993. xxvi + 261 pp., maps, illustrations, bibliographical essay, index. US \$55, cloth; ISBN 0-313-28567-5.

Already an old hand at describing the history of the US Navy in its first century of existence with biographies of David Porter, William Bainbridge and James Biddle to his credit, David F. Long, now retired from the University of New Hampshire after 45 years of service, has produced a worth-while study of a naval figure of lesser importance but one whose career, like those of his more noteworthy fellows, illustrates the world of the Old Navy and the men who directed it.

"Mad Jack" Percival (the sobriquet earned in his younger days from his fierce displays of temper) is most noted for three episodes in his long naval career: his forcing the native rulers of Hawaii in 1826 to rescind their clergy-inspired prohibition of their women boarding sailing vessels for the sexual pleasure of the ships' crew members; his twentyeight-month around-the-world cruise as captain of the Constitution (the first and only cruise of this type made by "Old Ironsides"); and, while on this assignment in 1845, his abortive attempt to convince the Vietnamese authorities to release a French priest into his custody, the first instance of American armed intervention in that country. In between these stirring adventures, Percival, like all officers in the peacetime Navy, spent his time angling with both naval and political figures for assignments and advancement in rank.

Long's biography of Percival is a text-

book illustration of exhaustive research methodology combined with a thorough knowledge of the period under examination. It is fair to say that this studiously researched and well written biography is as important for the light it sheds on the Old Navy as it is for detailing the life and adventures of one of its more colourful officers

It is, however, flawed in one minor respect. Long occasionally inserts into his text his own comments on the difficulty of ferreting out certain bits of genealogical or historical information or on the work of other authors with which he agrees or disagrees. While such asides are worth recording for the edification of the serious student of Percival or the nineteenth-century Navy, they should appear in the endnotes, not in the text where they serve only to distract the reader and interrupt the flow of the narrative.

Still, "Mad Jack" represents a first-rate piece of scholarship and a valuable addition to our knowledge of the Old Navy. It will be a worthy addition to any university or maritime library.

James M. Morris Newport News, Virginia

John C. Wideman. *The Sinking of the USS Cairo*. Jackson: University Press of Mississippi, 1993. xii + 139 pp., photographs, figures, appendices, notes, bibliography, index. US \$20, cloth; ISBN 0-87805-617-3.

The loss of the USS *Cairo* has been discussed in numerous books and periodicals related to Civil War naval history, notably in Edwin Bearss' seminal work, *Hardluck Ironclad: The Sinking and Salvage of the Cairo*, and in *Infernal Machines: The Story of Confederate Submarine and Mine Warfare* by Milton F. Perry. To my surprise and delight I discovered that the title of John Wideman's book is misleading. The *Cairo* is really a footnote, albeit a major one, to the career of his real subject, Zere McDaniel, a special operations officer in the Confederate secret service.

Wideman gives a concise synopsis of Union and Confederate strategies for prosecuting the war in the western theatre, which emphasized control of the Mississippi River and its tributaries. As the war progressed the story becomes the familiar one of a beleaguered Confederacy struggling to slow the industrialized Union war machine. An excellent example of northern superiority was their ability to produce a riverine navy which included seven heavily armed, armoured gunboats of the Cairo's design. Though the ironclads were vulnerable to concentrated gunfire, particularly plunging shot, the Confederacy's lack of a comparable river fleet doomed besieged southern strongholds to evacuation or surrender. As the weight of the Union juggernaut bore down, the southern high command explored every defensive alternative, including underwater and subterranean torpedoes.

Enter McDaniel, a native Virginian and millwright, who joined the Confederate withdrawal through Kentucky and Tennessee in early 1862. Wideman gives a thorough account of McDaniel's experiments with torpedoes and his exchange of ideas with other inventors including Matthew F. Maury and Gabriel J. Raines. In December 1862, while supervising a torpedo crew operating along the Yazoo River in Mississippi in support of the defence of Vicksburg, Mc-Daniel sank the Cairo. This was the first instance of a warship destroyed by what is now known as an undersea contact mine. Most wartime accounts concluded that the torpedo that sank the Cairo had been detonated electrically by galvanic batteries. Wideman, however, provides a detailed explanation of the construction and operation of McDaniel's torpedoes, which were self-detonating.

The destruction of the *Cairo* was not the end of Zere McDaniel's wartime career. While attempting a repeat of his success on the Yazoo, McDaniel managed to keep one step ahead of the Union envelopment of the Mississippi valley. Although the record of his movements is sketchy, Wideman makes the

best of the material that is available, even as he has the reader leapfrogging across the South with a severe case of "torpedoeus interruptus." Wideman readily acknowledges, however, that these torpedomen produced more detailed accounts of their successes than their failures.

Wideman has written a compact volume containing a great deal of information on a very esoteric subject. One of the major strengths of the book lies in the straightforward explanations and illustrations of the construction of torpedoes and their detonating devices. Much of this material survives thanks to McDaniel's repeated — and unsuccessful efforts to receive a lucrative compensation from the Confederate government for the destruction of the Cairo. An appendix of the original documents relating to the Cairo incident, a complete bibliography, user-friendly index and ample notes make this work a valuable addition to the libraries of naval and mine warfare scholars.

W. Wilson West, Jr. Washington, DC

William H. Honan (comp. & ed.). *Great Naval Battles of the Twentieth Century*. London: Robson Books, 1993. xviii + 361 pp., photographs, map. £18.95, cloth; ISBN 0-86051-862-0.

The blurb on the dust jacket of this book calls it "the finest anthology of modern naval writing ever published." If only this were true! Students of maritime and naval history expecting a scholarly treatment of the subject will be sorely disappointed. The selections that William H. Honan has compiled here clearly reflect his background as a reporter. Some of the selections are even taken from newspapers, and the whole work is so uneven in scope that it has the appearance of being collected hurriedly.

The anthology begins with the Spanish-American War, with accounts on the Battles of Manila Bay and of Santiago de Cuba in the Caribbean. In each instance American forces overwhelmed the Spaniards with their fire-power, with scarcely any loss to themselves. Do such one-sided victories qualify as "great" naval battles? Apparently the editor thinks so.

Honan next inserts a well-written account of his own, pertaining to the sneak attack in 1904 by eleven Japanese torpedo boats upon the Russian Asiatic Squadron at Port Arthur. Three Russian warships were sunk as a result. But this, too, was hardly a "great" battle.

One engagement that does fit the title of the book concerns the Battle of Tsushima Straits in May 1903. In this well-known battle, thirty-eight Russian vessels were sunk, captured, or put out of action with little loss to the Japanese. Honan allows us to witness the battle through the account of a Russian officer who was present.

As we come to World War I another journalistic account sketchily describes the exploits of the men aboard the German commerce raider Emden. It is a great story, but from a strategic point of view Emden's activities had little bearing on the outcome of the war. Honan also rums to more journalists to cover the Battle of Jutland. It would have been far more preferable had an expert written the complete story. A chart of the battle is sorely missed, and in fact there are no charts of any of the battles described here. There is one world map in the book. This merely lists the locations of the naval actions mentioned. The World War I period ends with accounts of a couple of audacious raids. But raids hardly qualify as battles.

As we turn to World War II, there is broad but uneven coverage. Honan provides accounts of the attack on the French ships in Oran, German submarine action, the *Bismarck* episode and, of course, Pearl Harbor as portrayed by historian S.E. Morison. Sadly, Honan has chosen the condensed version instead of the broader version that Morison wrote in his fifteen-volume *History of United States Naval Operations in World War 11*. For the Battle of the Coral Sea, where the opposing forces never saw each other except from

the air, Honan turns once again to a description provided by a journalist; more appropriately, a pilot discusses Midway, while Hanson Baldwin, truly an expert, recounts the Battle of Leyte Gulf, which was perhaps the greatest battle of modern times.

In more recent periods the editor includes a reporter's story of US Navy air action over Vietnam, the search for missing pilots, and the editor's own story as a reporter concerning the close encounters of the US and Russian Fleets in the Mediterranean. There is also a discussion of the undersea tracking of each other by American and Russian nuclear submarines. How can any of these events qualify as naval battles? The final piece in the book relates the sinking of HMS *Sheffield* by an Argentinean Exocet missile.

All the accounts in the volume are stories of undoubted courage, daring, and heroism, but only a few could be called "great" naval battles. The book requires a more apt title, and a serious student of naval history must look elsewhere.

Moreton J. Ensor Brewster, Massachusetts

Ray Walser. France's Search for a Battle Fleet: Naval Policy and Naval Power, 1898-1914. New York: Garland Press, 1992. viii + 310 pp., tables, sources, index. US \$72, cloth; ISBN 0-8153-0667-9.

This book should be called *Hidden Gold*, because it is so full of interesting and helpful information that is effectively concealed by an index that is of no appreciable use. This is a pity, because Walser has amassed a wealth of information about the relationship of political manoeuvring and naval posturing in France. If the Franco-Prussian war had a traumatic effect on the army, it had an even greater effect on the less powerful and nationally less highly regarded navy. Arguments that subsequently developed about ship type and production arrangements were fated to succumb to the general French desire not to pay heavily for

military adventures. The navy was also a victim of the fact that the people who would seem to have been their natural allies, the colonialists, often could not arrange an accommodation of views with the sailors. This was compounded by the Jeune Ecole. Like the reformers in England, they seemed unaware that their obsession with ship type provided anti-naval ammunition for the enemies of fleet development. But unlike the Royal Navy, the French Navy had no Admiral Fisher to knock the heads of these feckless combatants together. The fact is, that under the whole of this interesting account of shifts and turns of naval fortunes, the French Navy was simply slow to develop settled responses to the new age. This was true of education, the relationship of engineers and executive officers, and strategy.

The problem with strategy was that the French arrived at some conception of warship type in the machine age at about 1906, ten years behind the British. Naval debates as to whether the enemy was Italian, British or German, both in the Fleet and in the Chamber of Deputies, were delayed and not helpful. At the time when the British were backing off development by concluding an agreement with Japan, was precisely the moment when anglophobia was most rampant in Paris. The peculiar fixation with the English held the French back from rational appreciation of their real naval predicament. Triumph may have visited the political-planning arena between 1910 and 1914 as the author suggests, but the sanity came at too low a level to make cooperation with allies effective. Up to 1914 the French could not make up their minds who their real sea enemies were, and they were unwilling to pay for a blanket policy. It is a sad story.

However, Walser shows how the political shifts and traditions were unable to control or mould naval attitudes and traditions. This indicate story is well told here, and will not need to be done again, at this level, for many years.

Donald M. Schurman Kingston, Ontario

Siegfried Breyer. *Soviet Warship Development, Volume 1: 1917-1937*. London: Conway Maritime Press, 1992. 288 pp., photographs, figures, tables, appendix, references. £35, cloth; ISBN 0-85177-604-3.

What can one say? Soviet Warship Development gives fresh meaning to the expression, labour of love. Breyer toiled for almost thirty years researching, writing and gathering illustrations for this, the first in a projected multi-volume chronology that will trace the evolution of Soviet naval policy in a comprehensive fashion. The focus of this volume is on the period from the 1890s to the 1930s at which time the broad outlines of the Soviet, post-revolutionary, navy had become clearly visible. The central theme, throughout, is technology; it is a theme buttressed and enlarged by a remarkable array of elevations, photographs, diagrams and tables.

At the heart of this story is an intriguing paradox. On the one hand, Russian and Soviet industrial capacity was almost always inadequate to the task at hand. Throughout the period Soviet shipbuilders were obliged to order power plants from Germany and Great Britain and many Soviet ships were built abroad or derived from foreign designs. On the other hand, the Russians and the Soviets achieved an impressive number of firsts in the field of warship development. The General Admiral in the 1870s was reportedly the world's first armoured cruiser. The fourfunnelled destroyer Novik, launched in 1911, was the fastest ship of its class in the world with an endurance speed of 36.82 knots. And the Soviets are credited with producing the first triple-tube torpedo mountings in the world in the 1930s.

The Russo-Japanese War (1904-1905) resulted in the wholesale destruction of much of the czar's navy. In the aftermath of the war, the Russians devoted a great deal of time and energy to improving the armour protection on their warships and to increasing the number of destroyers — of which the *Novik* was one — in their fleets. Significantly, as

well, they began to build gunboats for riverine operations in the Russian Far East. This gunboat programme was a harbinger of things to come because a feature of the first Soviet naval construction plan (1926-1931) was the production of shallow draft, armoured cutters equipped with tank turrets that could be used on the great Russian rivers to support the flanks of the Red Army. Parenthetically, readers may wish to consult Robert Herrick's Soviet Naval Theory and Policy: Gorshkov's Inheritance (Naval Institute Press, 1989) to gain a fuller appreciation of the war in which the Red Army subordinated naval operations prior to the 1960s. Breyer's encyclopedic analysis demonstrates how this subordinate role was translated into boiler plate and rivets.

The modernization of shipbuilding that took place after the Russo-Japanese War was still underway in 1914 when the navy was plunged into the maelstrom of war, revolution, and civil strife. What is amazing, as Brever chronicles, is how early Soviet naval planners were able to begin rebuilding a construction industry paralyzed by bureaucratic incompetence, vandalism, and lack of technical expertise. Making virtue out of necessity, the planners embraced a jeune ecole philosophy. They had been deeply impressed by British motor torpedo boat operations against Russian naval forces at Kronstadt in the summer of 1919 and sought to develop their own class of MTBs. In fact, three hundred Gclass MTB's were built but their duraluminium hulls (designed to minimize weight) corroded so badly during service in the salty Black Sea that they had to be overhauled as often as once a week!

While there were some capital ships like the *Gangut-ciass* battleships (constructed between 1928 and 1938 and identified by the rakish angle of their fore funnel top) the Soviet navy was primarily a destroyer, patrol boat and submarine navy. The earliest Soviet submarines appeared in the mid-1920s and reproduced many features of contemporary Italian designs. The submarine programme, like so many others, was hamstrung by the

inadequacy of Soviet industrial capacity. Geography also played a part and the 32-metre, M-l class submarines of the 1930s were built in Sverdlovsk, transported by rail to the Black Sea for trials, and then sent, via the Trans Siberian Railway, to Vladivostok.

This is a first class work. Although (strangely) it lacks an index, it is organized in a sufficiently clear and systematic fashion that one can follow the evolution of Russian and Soviet ship types from their inception to their final deposition. In fact, an interesting feature of Soviet Warship Development is the thumbnail histories of vessels. These enable the reader to track the often chequered history of craft like the destroyer Kapitan Saken which was captured by the Germans in May 1918, seized by British interventionist forces later the same year, transferred to the French, transferred again to the White Russian forces, and eventually interned in Bizerta where it appears to have languished for a decade before being broken up in the 1930s.

James A. Boutilier Victoria, British Columbia

Louis Le Bailly. From Fisher to the Falklands. London: Marine Management (Holdings) Ltd. for The Institute of Marine Engineers, 1991 [76, Mark Lane, London EC3R 7JN, England; orders must be accompanied by payment; postage is extra], xii + 227 pp., illustrations, appendix, index. £18.73, cloth; ISBN 0-907206-40-9.

The sailing navy and a nuclear powered task force have an important attribute in common that was lost for several decades following the development of the dreadnought: mobility. In this sequel to *Man Around the Engine* (reviewed in *The Northern Mariner* III, no. 2, p. 98), we learn of the steps taken to restore mobility to the Royal Navy's conventional fleet.

In 1883 "Jackie Fisher" held the first of a series of Staff appointments ashore. In various capacities he was in a position to institute a programme of reforms designed to bridge the gap between the relatively primitive equipment of the age of sail and the growing sophistication of the products of the industrial revolution. In the face of considerable professional and social prejudice he sought to raise the status of the engineer. Through training he set out to develop a specialist officer branch to ensure that the efficiency of the fleet would not be jeopardized by the faulty maintenance of the innovatory machinery. He anticipated what a German Panzer General was to preach fifty years on, namely that the engine was as much a weapon as a gun.

Admiral Le Bailly traces the early successes of Fisher and the subsequent abandonment of his schemes in the financial stringency following World War I. The decisions reached in the 1920s had consequences that affected the efficiency of the Navy into the early years of World War II. He recounts how wartime operational experience shook the Admiralty out of its complacency and how the Royal Navy, more accustomed to operating in the confines of the North Sea and the Western Approaches, learned many practical lessons from their American counterparts familiar with the vastness of the Pacific.

By the 1950s the Royal Navy had become so hi-tech that the Admiralty set up a Royal Naval Engineering College at Manadon, near Plymouth. At some stage in their careers all officers of the seaman branch, whatever their speciality, would undergo training at the college with the object of ensuring that ships at sea are led by teams of officers whose skills are complementary. The author provides a comprehensive picture of the development of the engineering side of the service, the success of whose evolution was tested to the full in the recent Falklands campaign.

It is a cautionary tale for politicians bent on running the armed forces on the cheap, but for the historian of the future writing about the Royal Navy in the twentieth century it will prove an invaluable guide and source of reference. As a sea-going Engineering officer

and later in Staff positions the author had personal experience of the technological and management changes taking place and at some time worked for or with many of the personalities who achieved so much. It is sad to report history is repeating itself. On 1 March, 1993 *The Times* (of London) published a letter from Admiral Le Bailly regretting that the Royal Naval Engineering College at Plymouth was to be abolished and the faculty merged with the Royal Military College of Science at Shrivenham, another centre of excellence but with little relevance to the needs of the Royal Navy.

Norman Hurst Coulsdon, Surrey

Barrie Kent. *Signal! A History of Signalling in the Royal Navy.* Clanfield, Hampshire: Hyden House, 1993. xi + 371 pp., figures, maps, photographs, appendices, bibliography, index. £19, cloth; ISBN 1-85623-006-6.

It was interesting to learn that the initial wording of Lord Nelson's famous flag signal before the Battle of Trafalgar was amended to conform to the limited vocabulary of the Admiralty code book employed at the time; curious, too, that when Marconi demonstrated his wireless communication equipment in Royal Navy ships, a serving RN officer, working independently, had already succeeded in transmitting morse signals over a distance of three miles from a training ship to a receiving set in Admiralty House, Plymouth. Gems of information such as these permeate this history of signalling in the Royal Navy.

Writing *Signal!* entailed a prodigious amount of research, the assistance of many individuals and organizations, and the perspective of a highly experienced, literate and witty specialist. Barrie Kent, who was Captain of the RN Signal School (HMS *Mercury*) circa 1970, was an inspired choice to undertake the task. A foreword by Admiral of the Fleet Sir Edward Ashmore establishes the setting and significance of the account. The

book's appeal is not confined to communication specialists, naval strategists and tacticians; in style and scope it will hold the attention of the general reader.

Much of the narrative is directly pertinent to the RCN, given the close relationship to the RN that existed until recent decades. Indeed, an Appendix contains the names of some ten RCN officers who took the Signal Long Course at the RN Signal School before corresponding training was instituted at HMCS *St. Hyacinthe* (Québec) in 1944. A section of the book dealing with Commonwealth training facilities provides a summary of the development of communications in the Canadian naval service from 1939 through several restructuring exercises to the adoption of the Warfare Officer principle.

From the earliest forms of visual signalling, Kent describes progressive developments in morse and semaphore, wireless telegraphy and direction-finding, underwater signalling, RDF (radar), HF/DF (Huff-Duff), codes and code-breaking, and the secure high-speed data systems that ultimately became an element of the new Warfare Branch, merging operations and weapon engineering. Concomitantly, the book outlines the organizational and training adjustments necessitated by technological change. Looking ahead, one can envisage the establishment of a fully automated and integrated communications system.

Captain Kent recognizes that the modem trend towards automated systems is not without concern for the human element in signalling. This reviewer recalls the late Captain Eric Brand saying that in a dire emergency we might be dependent on "a boy scout on a bicycle" for vital communication. It may be providential that naval and ex-naval personnel have been encouraged to practise and hone traditional skills in radio, including morse, through The Royal Naval Amateur Radio Society, whose world-wide membership continues to grow.

The arrangement of the book is unusual, the narrative proceeding in historical sequence through seventeen chapters followed by a

"signal anthology" of six chapters and a final chapter on the Colours of the Fleet. Another distinctive feature is the use of marginal annotations whereby the author, at the risk of diverting the reader's attention, provides a fund of supplementary or elucidative information that might go unnoticed if it were in the form of footnotes. Throughout the text, the author intersperses descriptions of the tactical use and performance of signalling methods, for example at the Battle of Jutland and in the campaigns of World War II. The appendices will be of interest particularly to signal officers and communicators familiar with the RN Signal School.

Signal! appears at a time when, with evolving changes in training requirements, the Signal School (HMS Mercury), situated since 1941 at Leydene, near Peterfield in Hampshire, has moved to HMS Collingwood at Fareham. The book, printed in clearly readable type with few typescript errors and profusely illustrated, is a handsome addition to the nautical bookshelf.

George Schuthe Ottawa, Ontario

Alan Coles. *Invergordon Scapegoat: The Betrayal of Admiral Tomkinson*. Farr Thrupp, Gloucestershire: Alan Sutton, 1993. x + 193 pp., photographs, notes, bibliography, index. £14.99, cloth; ISBN 0-7509-0233-7.

The title of this book is misleading. It is given as "Invergordon Scapegoat" which naturally evokes overtones of the great mutiny of the Royal Navy at Invergordon, Scotland in 1931. In reality the book is a biography of Admiral Wilfred Tomkinson. Of nineteen chapters, only four deal with Invergordon or with mutiny and they only with Invergordon related to Admiral Tomkinson.

Tomkinson is a most engaging figure. His naval career was most promising until Invergordon intervenes to ruin it. People forget just how much a mutiny in a navy can ruin the career of men not really responsible and specially men not involved in the mutiny's causality which is the great search of those at the top. This becomes doubly true if they can find a cause divorced from themselves or their high-placed colleagues.

The causality of mutiny is generally somewhat difficult to ascertain because everyone involved, even in the remotest fashion seeks to exculpate themselves and, if possible, to do so by inculpating others. In Invergordon, the cause was a proposed cut in the sailors' wages. This was the second time wages had caused mutiny in the Royal Navy, the first time being the mutinies at Spithead and the Nore in 1798. Both times make clear the reluctance of British sailors to have politicians tamper with their wages. The British custom of overpaying senior officers and underpaying mere sailors gave great force to the mutiny factor in such circumstances

Coles sets out much of these circumstances. He is clearly a Tomkinson man and gives much good reason for being such. There can be little doubt that Admiral Tomkinson was badly or unfairly dealt with by the Admiralty. Unfortunately there exists, particularly in Britain, a curious impression that the Admiralty is a group of men above the ordinary human passions and quite incapable of unfair conduct. This, of course, is simply nonsense. The conduct of the Sea Lords in Tomkinson's case was deplorable and clearly unfair. Yet mutiny always generates panic at all levels: the mutineer is terrified of retribution, while the Sea Lords are equally terrified that they will be found incapable of running a navy or of preventing a mutiny. Invergordon was no exception to this rule.

One of the more curious aspects of Invergordon is the fact that there was never any inquiry into what happened. Poor Tomkinson was justifiably bitter about this aspect of things. The Sea Lords kept passing judgement on events and individuals but without the benefit of knowledge arising from any inquiry. Yet how could they know what had happened? Indeed, mutiny in Britain as elsewhere is something which naval authorities

always seek to conceal from the public, and consequently a list of the known mutinies in the Royal Navy reflects little credit on that service.

In Canada in 1949, when our three mutinies became known, the government of the day immediately ordered a full inquiry, which subsequently reported at length. I have no special knowledge about Invergordon but I say unhesitatingly that the British were fools not to do the same. Had they done so there would not have been the tergiversations lasting to this day and showing the Sea Lords not only to be a pack of fools but also a pack of mean-spirited fools. When they were faced with mutiny, the Sea Lords, terrified that the mutiny might be laid at their door, took every means, fair and unfair, to prevent this and to ensure that blame was attached elsewhere. In the absence of an inquiry, I remain convinced that they simply did not know what happened but acted blindly, perhaps a bit hysterically and certainly not very honestly.

One criticism levelled at Tomkinson was his failure to act energetically at the outset. Yet at the beginning of any mutiny, the mutineers have a serious feeling of hurt and they are close to hysteria; in such conditions energetic action could inflame the mutineers to regrettable action. I stand behind Tomkinson on this score. What did "Their Lordships" know to allow them to make this criticism? A good deal less than Tomkinson himself.

The book is interesting and well written. It is a good depiction of the Royal Navy in the twenties.

L.C. Audette Ottawa, Ontario

Eric C. Rust. *Naval Officers Under Hitler: The Story of Crew 34.* Westport, CT: Praeger, 1991. xii + 229 pp., tables, photographs, notes, bibliography, index. US \$47.95, cloth; ISBN 0-275-93709-7.

This collective biography of the 318 men who joined the *Reichsmarine* in 1934 as officer

cadets traces their lives from their upbringing during the Weimar Republic through their naval training, wartime experiences, and postwar careers. Special emphasis is placed on their psychological outlook. The book sheds light on the German naval officer corps as an institution and fills a void in naval historiography.

Rust chose Crew 34 because of its age and size. Previous crews were too small to be representative while following crews were too large to survey easily. Most members of Crew 34 served during the war in the ranks between Lieutenant and Commander, being junior enough to serve at sea but senior enough to achieve command. Rust relied upon personal interviews, questionnaires, crew newsletters, and archival documents but official personnel records remain closed. The confidentiality of his sources has been protected by the use of a code. This has perhaps ensured more honest responses but prevents the reader from getting much of a feel for the personalities of individual officers.

The family background of Crew 34 was primarily upper middle class, reflecting the fact the Reichsmarine considered lower middle class applicants undesirable yet was unable to attract members of the nobility. Most of the crew came from North Germany and consequently Protestants greatly outnumbered Catholics. The political views of their parents were overwhelmingly deutsch-national, that is, the conservative, monarchist, authoritarian, and anti-democratic beliefs expressed by the German National People's Party. Rust's survey revealed "amazing unanimity" on this score. If the respondents can be trusted, only one father joined the Nazi party early on.

The most controversial conclusions regard the political sympathies of the crew, and the *Kriegsmarine's* relationship to Hitler and the Nazi party. Rust argues that the naval officer corps was insulated from political influences and remained steadfastly apolitical. The Navy's disastrous political intervention between 1917-20 had created an ethic of strict

obedience to civilian authority. Though Hitler's rearmament and foreign policy triumphs received widespread support from the crew, only a handful of the men, perhaps as few as ten, could be described as hard-core Nazis. In many instances, crew members resisted intrusions from the Nazi party during the war and were supported by their superiors in these efforts, notwithstanding Dönitz's collusion with Hitler.

Crew 34 compiled an impressive record of wartime service. Thirty-nine members received the coveted Knight's Cross. The ace was Erich Topp who stood fourth among German submarine commanders in terms of tonnage sunk and was the most highly decorated member of the crew, as well as the only one to attain the rank of captain during the war. In contrast, Heinz Eck was the only submarine commander to be executed by the Allies for war crimes, the machine gunning of survivors. Slightly over 40 per cent of the crew died during the war; three-fifths of them were submarine officers. Thirty-eight crew members ended the war in captivity, mostly in camps in the United States and Canada. Two of the latter group later settled in Canada.

After the turmoil of the immediate postwar years most of Crew 34 had taken up rewarding civilian careers when the *Bundesmarine* was created in 1955. One-third opted to return to the Navy. The imprisonment of Dönitz and Raeder steeled the will of many, especially former submariners, not to serve with the western allies. Curiously, many of those who rejoined later complained that promotion depended upon membership in the proper political party.

Naval Officers Under Hitler makes a significant contribution to our understanding of the beliefs, motivations, and experiences of the German naval officer corps, and is a valuable addition to the naval library.

Robert C. Fisher Ottawa, Ontario Hugh I. Power, Jr. *Battleship Texas*. College Station: Texas A & M University Press, 1993. xx + 141 pp., photographs, figures, glossary, appendices, suggested further reading, index. US \$29.50, cloth; ISBN 0-89096-516-1.

The *Texas* is unique among twentieth-century battleships simply because she is the only first-generation dreadnought which has been preserved. She saw extensive service in World Wars I and II, and has the distinction of being the only American battleship to fire upon Vichy French, German and Japanese shore installations during the latter conflict. In 1948, the state of Texas purchased her from the US Navy in order to preserve her as a state memorial and museum, and she is now berthed at San Jacinto State park. The reader should note that Power's contribution to this volume consists largely of the many photographs presented in the second part of this work. The Introduction, which is really a brief historical narrative, was written by John Reilly.

The book is divided into two sections of unequal lengths. The first is a narrative history of her career and her place in the history of battleship development. The second is best described as a personalized guided tour of the ship as she appears today. Readers who are unfamiliar with naval terminology and history will certainly appreciate the glossary which Power has provided. The first appendix gives us a detailed summary of the ship's construction and armament data, for both her original configuration and that of 1945. The second lists her captains and their periods of service.

The introductory text is well-illustrated with many photographs and a few illustrations. The latter include her starboard profile, a view of her main deck, as well as the two full-length lower decks. A good feature of these two-page drawings is that no details are lost over the book's spine. The major drawback of all the illustrations in this book is that the scale is never indicated. The few smaller ones which accompany the introduction also appear to be overly simplified. Nonetheless, Reilly has provided a very useful summary of

the career of this historic warship and its place in the evolution of this warship type.

The larger second section consists of detailed studies of fifty selected areas of the ship itself. Each is highlighted by a detailed photograph taken by Power; all are accompanied by a brief note on the use and history of each piece of equipment or installation. Six of these photographs are further detailed by a smaller keyed drawing which identify the main components shown in the photographs. Power does not seem to have missed anything of importance, and his comments indicate that he is well-versed on the ship's equipment and history. Readers might be surprised to learn that the *Texas* was the first American battle-wagon to be equipped with radar.

All in all, this is a good guide to this ship. One can only hope that other preserved men-of-war throughout the world will receive similar treatment. It should appeal to people who have toured this ship, those who want to, as well as model-builders and ship lovers.

Peter K.H. Mispelkamp Pointe Claire, Quebec

Robert C. Stern. *The Lexington Class Carriers*. Annapolis, MD: Naval Institute Press, 1993. 160 pp., photographs, figures, references, index. Cdn \$47.95, US \$34.95, cloth; ISBN 1-55750-503-9.

In contemporary warship design, the "weapons system" concept is key; i.e., warships are designed as a collection of subsystems, that, working in concert, permit a warship to attack a given target at a certain time and place. The concept is not new, and the *Lexington-class* carriers of the US Navy from the 1920s to the 1940s are early examples of the "weapons system" concept at work.

In a lavishly-illustrated book, *The Lexington Class Carriers*, Robert C. Stern analyzes two early US Navy aircraft carriers, the *Lexington* and the *Saratoga*, from a weapons system perspective. Stern details these two carriers in terms of the ships' subsystems.

There are five major chapters — "Design Genesis," "Physical Characteristics," "Protective Systems," and "Radio and Radar." These chapters are further divided into subchapters. For example, Chapter 2, "Physical Characteristics," has within it subchapters on "Hull," "Propulsion," "Crew," "Provisions," and "Sanitation." Somewhat confusingly, footnotes appear at the end of each *sub*chapter, rather than at the end of the chapter or at the end of the book. Photographs, all from US Navy archives, appear on virtually every page. The close integration of text and photographs helps bring the reader in tune with the subject of the text.

The history of the carriers' design and constant improvements thereto is fully set forth. The emphasis is on the technical systems of the ships, and less so on the service histories of the *Lexington* and *Saratoga*. While the *Lexington* was sunk in 1942 at the Battle of the Coral Sea, the *Saratoga* survived the war only to be sunk in Atomic Bomb tests at Bikini Atoll. Further, both ships were commissioned in 1927, and therefore had a long pre-war service career. It might have been advantageous for the general reader's benefit to have included fuller accounts of the respective ships' service careers.

There are no appendices but supplemental sections on paint schemes and air groups are included after the end of the text. There are no drawings of the camouflage schemes applied to these carriers, but a number of photographs illustrate the camouflage on the ships. The aid this section presents to the modeller or marine artist is therefore limited. The air groups section is a brief description of the aircraft and squadron organization of the carriers. This is far too brief, as aircraft are the raison d'etre of an aircraft carrier. There are no descriptions of the aircraft used, nor the colour schemes applied. The US Navy squadrons of the pre-war era had some very colourful and attractive markings applied, and the book would have been better with more information about the aircraft and their markings. In fairness, however, the book might have

expanded beyond manageable limits had more aircraft information been included.

In reading this book, one is reminded of the schoolgirl's comment: "this is a very interesting book on pelicans; it tells me more than I really want to know." The book is almost an *ex post facto* technical manual of the *Lexington*-class carriers, and has no unifying narrative. It would easily seem disjointed to a casual reader, and not very useful to the naval aircraft enthusiast. Given the mass of technical detail contained within, Robert C. Stem's *The Lexington Class Carriers* is a book for the serious student of US Navy ships or aircraft carriers. It is not recommended for those without a deep interest in these subjects.

Robert L. Snoop Colorado Springs, Colorado

Mack Lynch. *Orion - Mighty Warrior*. Toronto: Lugus Books, 1992. iii + 313 pp., drawings, figures, maps, photographs. \$18.95, paper, ISBN 0-921633-03-3.

The author of this marvellous book was a young Canadian radar officer in British cruisers during the war. This is the tautly-told story of his time in his first ship, HMS *Orion*. Mack Lynch's aim was to tell what it was like to be transformed in a matter of months from an engineering student at Queen's University to responsibility for the radar systems in a major warship in the heavy Mediterranean fighting of 1942-43. By recounting his own experiences Lynch hoped to draw attention to the more than 123 Canadians who served as the Radar Officers of the major ships of the Royal Navy.

Theirs is a remarkable story. At the beginning of the war the RN, faced with a severe shortage of technical officers, asked Canada for the loan of engineering physicists. The RCN recruited graduating students into the RCNVR who arrived in England just in time to constitute the entire first class of officers appointed to look after the highly secret device being fitted in capital ships and

cruisers which would become known as radar.

Canadian radar officers were involved in most of the British big ship operations and engagements of the war. Mack Lynch was in the second class, and he deftly tells of his naval training and how he came to realize his hopes of joining a fighting cruiser. This is a most engaging story told with an economy of words. Lynch adroitly and vividly sketches in everyday life in a cruiser at war as he and his shipmates experienced it. Apparently invariably addressed as "Canada" by his Captain and fellow officers, he had a special status as the expert in charge of the systems which greatly enhanced his ship's fighting capabilities and ability to survive. Interesting details are given about how knowledge of the operational capabilities - and limitations - of radar were being expanded by radar officers like Lynch. He was an astute observer and covers a wide spectrum including experiences at sea and ashore, his concern for his subordinates, his relationships with other officers, and his technical problems. While there is a sense of an overall sequence of dates and key events this is really a series of anecdotes and impressions. The author is particularly good at conveying atmosphere. His technical descriptions are succinct and clear. In reading the narrative your reviewer was reminded of C.S. Forester's juxtaposition of action and background detail. It was interesting to read that Lynch indeed knew Forester well and collaborated with him after the war.

Mack Lynch was twenty-four when he joined his first ship. He went on to have a distinguished technical career in the post-war Navy. In retirement in Ottawa he was a driving force behind the creation of the *Salty Dips* series. It is obvious from this book that he learned a lot during his first and eventful appointment at sea, and enjoyed almost every one of his experiences. While *Orion* participated in many operations she was, as Lynch tells us, a "lucky ship," and this is on the whole a sunny story of adventures which mercifully did not include the horrors endured by some others.

This engrossing book is not only a "good read" but a highly rewarding one. It must rank among the best descriptions by a Canadian of what it was like to serve at sea during the war. Mack Lynch died in July 1993. It is a pity that he did not enjoy the fruits of the labours which went into this book.

Jan Drent Victoria, British Columbia

J.W. (Dick) MacKintosh. *The Hunts and the Hunted*. Durham: Pentland Press, 1992. xviii + 230 pp. £10.50, paper; ISBN 1-872795-67-6.

Dick MacKintosh joined the Royal Navy (Hostilities Only) on 1 December, 1939, having just completed his studies in law. Six years and one month later he left the navy as a temporary lieutenant, RNVR, in a badly fitting civvy suit with a bounty of £111 and a letter of thanks from the Admiralty in his pocket to begin the practice of law. This book is his account of the lifetime of experience accumulated in those six years.

The book's fifty-eight short chapters are best dealt with as three parts: first, the author as convoy signalman, then as a sub-lieutenant with the Naval Control Service and finally his experience in the Hunts in the Channel, the North Sea and the Mediterranean.

The best of the three parts is the first, for here the author gives something of a feel for the heavy responsibilities thrust upon these young signalmen who had had very little training and for the most part no sea-going experience. It was upon their sharp eyes that the convoy commodores depended to maintain communications with the ships of the convoy. It was an uncertain life: outward bound in one ship, homeward in another. Accommodations varied from first-class cabins in the great cargo liners to the forecastle in the small tramps, and the tempers and temperaments of commodores and masters were as changeable as the weather.

Eleven months after joining the navy,

MacKintosh was selected as a candidate for a commission—a CW candidate—and was sent on course to HMS *King Alfred*. At the end of it, with a new Gieve's uniform and a single wavy stripe, he became a boarding officer with the Naval Control Service. The eight chapters of this part reflect little but the boredom and frustration of a young officer committed to shore duties on his first appointment. The reader along with the author is relieved when MacKintosh began his destroyer-familiarization courses in January, 1942.

He spent the next two and one-half years in Hunt class destroyers. He was present at the Dieppe raid in July 1942. His ship was sunk that December and, in another ship, he went to the Mediterranean to participate in Malta convoys, the invasion of Sicily, the crossing of the Straits of Messina and the landings at Salerno and Anzio. In late summer 1943 he was appointed Transport Officer and Executive Officer of a repair base for small vessels at Portville in French North Africa where he served a year before being sent home for eventual demobilization.

All this should have provided the stuff of a good story, but it has not. Part of the problem is that MacKintosh has chosen to write in the third person, giving himself the name of Kenneth Dow. If the narrator, then, is a fictional character, the reader must assume that the names of all but the most public personalities have been disguised. The names of the five Hunt class destroyers in which he served have clearly been disguised, for only one of these, HMS Ramsey, is to be found in Colledge's Ships of the Royal Navy (New York, 1969), and that one could not possibly be the *Ramsey* of these memoirs. A consultation of Lloyd's Register of Shipping would probably reveal that the merchant vessels to which MacKintosh refers have also been given fictitious names. Similarly, mystery surrounds two place names, Invercaim "in western Scotland" and Portville "in French North Africa." The reader could reasonably have expected more precise locations for each.

There can be a variety of good reasons to

hide the identity of certain individuals, ships or even places appearing in a work such as this. Surely, however, the reader is entitled to be told what can be relied upon as fact and what, for the author's own good reasons, has been related as fiction. Otherwise, the integrity of the whole work is suspect.

There is thus little left of the book but a series of vignettes offered in isolation from any sense of reality. Consequently, they add little to what is already available. See, for example, Frederick Watt's *In All Respects Ready* (Scarborough, Ontario, 1985) as an authoritative account of the Naval Boarding Service, or John Davies' *Lower Deck* (New York, 1945) as a first-class account of wartime life in the messdecks of an RN destroyer. The authenticity, realism and humanity reflected in both of these works is sadly lacking in *The Hunts and the Hunted* which therefore cannot be recommended to serious students of naval history.

C.B. Koester Kingston, Ontario

R.A. Brown and Robert J. Schneller (comps.). *United States Naval Forces in Desert Shield and Desert Storm: A Select Bibliography.* Washington, DC: Naval Historical Center, 1993. iii + 50 pp.; stapled typescript.

Three years have passed since Iraq's invasion of Kuwait, and the reading list continues to grow by the month. In their introductory notes, compilers Brown and Schneller admit the elusiveness of their task, advising that their work "should be considered a first cut, not the last word." (i) Within that recognized limitation, this is an impressive attempt. They have captured the first wave of material, the "quick looks" and "lessons learned," along with the inevitable soap boxes and justifications. As such, they do not include many of the more studied works which are just beginning to appear, but are well-timed to serve as a foundation for those that will follow.

The approach is directed to the study of

operations by the US Navy, but also includes references offering a more general context. A good reading quickly reveals the extent to which the Gulf conflict has been covered, and will illustrate to the novice the diversity of the experience of modem naval warfare. The more than five hundred entries are divided into five sections, and are frequently accompanied by an insightful one-sentence annotation on style and substance. The "finding aids" and "source materials" are comprehensive with regards to US government departmental publications. The wide-ranging entries under "books" cover subjects as diverse as Allen et al's CNN War in the Gulf, through Hawley's Against the Fires of Hell: The Environmental Disaster of the Gulf War and Palmer's Guardians of the Gulf (reviewed in The Northern Mariner, April 1993), to Yergin's The Prize: The Epic Quest for Oil, Money, and Power. The "articles" section has been kept manageable by the wise decision to limit citations to scholarly and defence journals - researchers will have to conduct their own cull of newspapers and popular magazines. Inclusion of a "video" selection is ground-breaking, for Desert Storm was nothing if not a visual experience.

Without this volume to guide the way, aspiring Gulf War historians would face a daunting task. Omissions are always easily identified, and one hesitates to do so but for the fact that a subject of special interest relations of the US Navy with its coalition partners — rates relatively few entries. The extent of allied cooperation is not conveyed by the mere half-dozen citations recounting the British, Italian, German and Argentinean efforts. In large part, this is a sad reflection of the state of literature in this field. Still, this number could easily have been doubled, and some useful French and Canadian works included to round out the theme. Overlooked also is an important compilation of basic documents on sanctions and their economic consequences, by the University of Cambridge Research Centre for International Law (published by Grotius, 1991).

These hesitations aside, future compilers will now have Brown and Schneller to add to their list of "finding aids," with the recommended annotation: "an indispensable starting point for any study of United States naval operations in the Persian Gulf."

Richard H. Gimblett Blackburn Hamlet, Ontario

John E. Peters. *The U.S. Military: Ready for the New World Order?* Westport, CT: Greenwood Press, 1993. xii + 176 pp., tables, figures, bibliography, index. US \$49.95, cloth; ISBN 0-313-28591-8.

Colonel Peters' (US Army) doctoral thesis from Georgetown University, a study of US Department of Defense strategic planning focused on the United States Army, is Number 133 in the Contributions in Military Studies series of Greenwood Press. Peters asks, and then proceeds to propose an answer to, the question: "With the Cold War concluded. President Bush's declaration of a new world order and domestic and international demands for peace dividends, what kind of military should the United States have? What capabilities should this force possess? Is the Defense Department likely to produce the forces this nation needs, and if not, why not?" The study examines factors and influences that make changes in the military likely and advisable, examines the US DOD process for strategic planning and force structuring, and suggests an alternative approach.

The book is tough sledding, turgid and convoluted in style, and full of jargon. The present strategic approach, says the author, is unlikely to produce the best force for the United States because military and civilian perceptions of needs and priorities seldom agree ("a fissure has developed in the process that separates policy considerations from military-technical issues"), new ideas have difficulty getting accepted in DOD ("the defense establishment is a neocorporatist structure organizationally, which limits the

breadth of choices it can consider in adjusting to new conditions and requirements") and, in the US system, there is a division of powers between the President and Congress ("the President and Congress engage in bureaucratic politics, often bargaining with each other on military questions, since each has roughly equal constitutional powers over the military."). President and Congress are unlikely to change their ways, but Peters believes that better forces could be produced by changing the DOD organization ("though the presidential-congressional struggle will likely continue, radical change could correct the other two dysfunctional aspects of the present strategic planning system").

In concluding that the Department of Defense is neocorporatist, as opposed to pluralist or politico-bureaucratic, the reader is invited to wade through the following: "pluralism is a system of interest intermediation in which the constituent units are organized into an unspecified number of multiple, voluntary, competitive, non-hierarchically ordered, and self-determined categories that are not specifically licensed, recognized, subsidized, created or otherwise controlled in leadership election or interest articulation by the state and that do not exercise a monopoly of representational activity within their respective categories. Corporatism is defined as a system of interest intermediation in which the constituent elements are organized into a limited number of singular, compulsory, noncompetitive, hierarchically ordered and functionally differentiated categories recognized or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports." Whew!

Colonel Peters gives his personal view of what the future holds, and of the military requirements for the United States which flow from it. He concludes that such logical plans as his could not be implemented by the present neocorporatist system. Peters therefore

recommends that the Department of Defense be streamlined and a new strategic planning system be created. The individual services would have to be removed from force planning; they should train and command operational forces. A single 200-strong integrated defence staff should be created, under a civilian CDS, composed of "defense professionals" and political appointees which would consider political and military-technical matters together. The staff should be organized in functional areas.

Peters does have the grace to say: "Service resistance to such a move would be extreme". I'll say! And resistance would not be ill-founded. Peters advocates a complete restructuring of the US Armed Forces based upon his own view of the future, and a revolutionary reorganization of DOD to bring it about, both of which to me are folly. The first is folly because "prophesy is very difficult, especially of the future" (Sam Goldwyn, I think). In addition, most extremely complex systems, such as defence planning, need to be able to bring the experience and brain power of the leaders of the organization to bear on the decision making. The leaders should have strong views, and put them vigorously, reach agreements, and be accountable for the results. I would far rather put my faith in that, than what Peters proposes.

Incidentally, the system described has virtually nothing in common with that of the Canadian Department of National Defence. His only reference to Canada, that "Canada has recently abandoned its experiment with an integrated defense force. The expected efficiency from centralization and pooled expertise especially in the realm of combat support and service support functions apparently did not materialize," is wrong.

This book may be of interest to students of United States defence matters, and perhaps of marginal interest to Canadian defence planners although the price is a deterrent.

Dan Mainguy Ottawa, Ottawa W. Michael Reisman and Gayl S. Westerman. *Straight Baselines in International Maritime Boundary Delimitation*. London: Macmillan, 1992. xvi + 242 pp., maps, bibliography, index, cloth; ISBN 0-333-56570-3.

This book is about straight baselines. When states demarcate their 12-n. mile territorial sea and 200-n. mile offshore zone, they measure seaward from a baseline. International practice accepts that this baseline is either the low-water mark on the shore or a straight baseline constructed seaward from the coastline designed to smooth the sinuosities of the coast. The employment of straight baselines by states is sanctioned by a 1951 International Court of Justice decision and both the 1958 and 1982 United Nations treaties on the law of the sea.

Obviously, the further seaward a state constructs a straight baseline, the greater the expanse of ocean that comes under its iurisdiction. Moreover, the waters landward of a straight baseline are of a different legal character than the waters seaward of a straight baseline. In simple terms, the waters seaward of a straight baseline are the internal waters of a state and thus subject to the total control of the state. In the waters seaward of a straight baseline, a state must accept the passage of vessels in the territorial sea and beyond 12-n. miles, a state's exercise of jurisdiction is limited to control over resources. Thus, the construction of straight baselines may interfere with the navigational interests of other states.

In response to public concern over the voyage of the US Coast Guard vessel *Polar Sea* through Canadian Arctic waters in 1985, Canada announced a system of straight baselines around the Arctic islands. It is a highly technical and debatable point whether the Arctic straight baselines have the legal effect of assuring Canada's absolute jurisdiction over all activity in waters landward of the straight baselines. However, it is unquestioned that the straight baselines are a legal and political assertion of Canada's determination to view the landward waters as controlled by Canada.

The 1951 International Court case and the 1958 and 1982 ocean treaties which sanction the use of straight baselines also seek to establish criteria for constructing straight baselines. The criteria lack precision. For example, there is no limit on the length of a straight baseline, the number of straight baselines that can be used along a coast, or the area of water which can be enclosed by the baselines. What is provided is that straight baselines are only to be employed where there exists either a deeply indented coast or fringing islands and that the baselines are not to depart appreciably from the general direction of the coastline. There are also some constraints on features that can be used as basepoints.

Reisman and Westerman argue vehemently that the ambiguous criteria for constructing straight baselines must be interpreted narrowly, that the criteria have a technical precision, that the criteria are being extensively abused and ignored by states, and that there is a pressing need to deal with this problem. Much of their book is devoted to pointing out the "pathological claims" of states to straight baselines which, in the authors' opinion, do not comply with the restraining criteria on baselines. Canada's straight baselines on the East, West and Arctic coasts get a mixed review from the authors, although they do not systematically examine the Arctic baselines which have been criticized by the United States government as not complying with international norms on straight baselines.

The authors acknowledge, as they must, that: an overwhelming number of states like using straight baselines; most states appear comfortable with the flexibility of the ambiguous criteria of the relevant treaty provisions; the International Court of Justice has not felt compelled to comment about straight baselines in decisions where the opportunity has arisen; and there is little state support for a re-examination of the international norms regarding straight baselines. The exception is the United States and this book is an elegant plea for the American view on straight baselines.

The authors argue their case well, although the tone of the book with its suggestion of dire consequences if the "pathological" employment of straight baselines is not immediately dealt with gives the argument an air of unreality. Certainly, the straight baseline phenomenon needs to be monitored and the truly outrageous practices called into question. Avenues for accomplishing this are provided by the authors. This is the useful contribution of this book for the law of the sea specialist.

Ted L. McDorman Victoria, British Columbia

Doug Gray. *The Rideau Navigator: Going Down the River, Not Up the Creek.* Bumstown, Ont.: General Store Publishing House, 1993. I11 pp., maps, photographs, illustrations, bibliographies. \$14.95, paper; ISBN 0-919431-65-8.

This is not your ordinary cruising guide. Rather, *The Rideau Navigator* is a light-hearted way to absorb some very sensible advice. One doesn't cruise the Rideau seeking high adventure. Nevertheless, twenty-four years of service with the Canadian Coast Guard taught Doug Gray respect for the waters and waterways of his world, even those as sheltered and bucolic as the Rideau which meanders through eastern Ontario between Kingston and Ottawa.

The author does not try to usurp the function of the Tourist Bureau. The reader will not find here a guidebook with suggestions as to where to shop or dine or enjoy the several small local museums, or simply absorb the legacy of artisanry left by the Scottish stonemasons of a century and a half ago. What he will find is ample space devoted to cruise planning and preparation so that surprises will at least be manageable. Equipment, provisioning, navigation, hazards, locking procedures (some good, sensible stuff here), regulations and environmental concerns are all discussed — and selection of shipmates. However, not

until the very end does Doug Gray let us in on his own choice of vessel — the logical, if unusual, product of all that he has told us.

Perhaps in a sequel we will hear more of the sights and sounds and secret places of the Rideau — and become better friends with the ubiquitous Dr. Lake whose pungent comments introduce each chapter, who is identified only as an "Eye, Ear, Nose, Throat and Skin Blemish Specialist," and who prepared his "Chart of the Rideau Lakes Route" in 1907.

The book is well illustrated both photographically and anecdotally, making it a good bedside companion whether or not one intends a Rideau cruise. If this reviewer so intended, he would first spend an evening digesting *The Rideau Navigator* into checklists — and then take Doug Gray's book along for fun.

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Dave Gerr. *The Nature of Boats: Insights and Esoterica for the Nautically Obsessed.* Camden, ME: International Marine Publishing, 1992. xiv + 418 pp., figures, photographs, index. US \$29.95, cloth; ISBN 0-87742-289-3.

This is an off-the-wall and entertaining tour among the questions asked most often about boats — why does that sailboat tip more than another? how thick should a hull be? — and other aspects of what the author calls "boat noodling" such as sketching, scheming, analyzing, and planning boats. All are behaviours of the "nautically obsessed." In its mild forms, boat noodling is not serious, but in its most addictive and trying forms it causes normally sane people to go off and try to build a boat.

David Gerr is a naval architect living in New York City and author of a column in *Offshore* magazine; his characteristic flair, humour and irreverence are laced through the pages of this book. Many of the chapters are re-writes of his Offshore columns. The book is divided into twelve parts covering a variety of subjects (such as design, stability and displacement, hull shapes, speed, sails, ergonomics, and rudders, among others). The chapters in each part are provided imaginative titles to engage the reader. Thus, Part 6 on "The Iron Breeze" (on engines) contains five chapters on "engine lore," "let's talk torquey," "the care and feeding of a power plant," "the case of the boat that shook," and "outboard info." Serious sailors may not appreciate such irreverence, but kids and partners seeking a Christmas gift for the boating nut in the family will surely appreciate its user-friendliness.

The smoothly written and generally clear text is supported by detailed and finely executed line drawings and photographs where appropriate. These features are particularly apparent in the section on engines, where there is a very clear comparison of gasoline and diesel engines and analysis of the merits of two or four cycle engines. The only problem is that some topics are treated with extreme brevity (thus, only five and a half pages on outboards) and the information, such as that on stemdrives, will date rather quickly.

What will not date are Gerr's lucid explanations concerning hull forms, stability and such like. The information is eminently useable; this reviewer has already used the material on propellers to help a friend who had just installed a new Perkins engine on a Catalina 30 sailboat but could not get proper information from either Perkins or the boat manufacturer concerning the best wheel. Gendoes not get into this kind of detail either but the analysis concerning the theory pitch, diameter and other matters positions the reader to ask the right kind of questions. In brief, this is a boating book with flair and humour.

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