## **Book Reviews**

Nick Ball and Simon Stephens. *Navy Board Ship Models*, Barnsley, S. Yorks: Seaforth Publishing and Royal Museums Greenwich, www.seaforthpublishing.com, 2018. 192 pp., illustrations, table, glossary, notes, bibliography, index. US \$64.95, UK £40.00, cloth; ISBN 978-1-5267-0111-4.

It might surprise many people to know that ship models were not initially items for hobbyists. They had specific technical, economic, commercial, and military functions. Further, the craft of ship modeling is centuries old. Ship models have served many purposes, among them technical, design, exhibition, and pleasure. Located within the British Admiralty, the Navy board was responsible for the day-to-day civil administration of the Royal Navy from the sixteenth to the early-nineteenth century. Navy Board models—a subcategory of exhibition models-were made for both display and technical purposes. In this detailed and visually-rich volume, Navy Board Ship Models, authors Nick Ball and Simon Stevens significantly contribute to ship model literature. Focusing on the collection of Britain's National Maritime Museum, the work provides a ready reference to Navy Board ship models in a full-colour volume that illustrates the museum's collection with numerous photographs of the models from various angles, highlighting specific decorations and construction details.

Co-author Nick Ball has maritime museum experience at both the National Museum of the Royal Navy and Royal Museum Greenwich's National Maritime Museum (NMM) in London, where Simon Stephens curates. Additionally, Stephens wrote another definitive work on models (with co-author Brian Lavery), Ship Models: Their Purpose and Development from 1650 to the Present (1995). Ball and Stephens' extensive working knowledge of the collection launches readers right into an immersive tour of the NMM's definitive collections. As summarized by museum director, Kevin Fewster:

"The ship model collection at Royal Museums Greenwich is the largest publicly owned one in the world, totaling over 4,500 models. Foremost amongst them is the highly-prized collection of fifty-four Navy Board models

The Northern Mariner / Le marin du nord, XXIX, No. 2 (Summer 2019), 159-208

dating from the 1650s through 1775... the Museum's ship models provide unrivalled insight into many aspects of the seventeenth-and-eighteenth-century British Navy (6)."

The authors divide the work into three sections: Historical Background, Construction and Materials, and Catalogue of the National Maritime Museum's Navy Board Ship Model Collection. The first section gives the reader an introductory background of the history of Navy Board models, placing them in a social and cultural context. The second chapter outlines basic materials, tools, and construction, and the final section illustrates each of the 54 models in the collection, complete with drawings, photographs, and detailed descriptions. Coverage of each model includes introductory information for a general audience, as well as details that would interest model makers and curators, as evidenced from the pages illustrating the 70-gun ship, Bedford:

"Apart from the newly introduced 80-gun ships of the 1690s, the 70-gun Third Rates remained the most prolific during the first half of the eighteenth century, up until 1756 with the introduction of the new 74-gun ship. Under the 1695 building programme, Parliament granted funds for three...named after senior officers of the Admiralty. The *Bedford* was named after Admiral Edward Russell, who was First Lord of the Admiralty and later created Duke of Bedford in 1694..." (136-139)

This model has now been positively identified as the *Bedford*, launched in 1698, by comparing known dimensions, together with contemporary drawings by Willem van de Velde. This is backed up further with the carved dolphin cradle supports bearing the initials 'FH' and the date 1698. "This refers to Fisher Harding, Master Shipwright at Woolwich and designer of the *Bedford*... (138)."

The authors succeed in providing a definitive Navy Board model reference for modelers, collectors, historians, and anyone interested in ship models and construction. The book is especially valuable for the general study of exhibition models and for tracing the history of specific collections, as it includes a directory of "Navy Board Models Held Elsewhere." Usefully, the directory matrix identifies Navy Board models and models that are similar in style, including the name of each identified model and its location at the time of writing. Additionally, the table includes the year the model was built, number of guns, rate, and scale. The appendix contains a comprehensive glossary and index, and notes provided from the co-authors' curatorial perspective are beneficial.

The volume enhances standard works on ship models, including volumes such as Brian Lavery's *The Ship* of the Line: A History of Ship Models (2014); Navy Board Ship Models: 1650-1750 by John Franklin (1989); and Philip Reed's Building a Miniature Ship Board Model (2009). This volume rightly takes its place among books that interested readers, historians, modelers, and collectors will want to own.

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G.H. Bennett. *The Royal Navy in the Age of Austerity 1919-22: Naval and Foreign Policy under Lloyd George.* London and New York: Bloomsbury Academic, www.bloomsbury.com, 2018, xvii+273pp., tables, index. US \$39.95, paper; ISBN 978-1-3500-6711-0 (E-book available.)

After the First World War, the Royal Navy entered a period of challenges for the British state and the application of naval power in relation to diplomacy and the national economy. Although on the winning side in the fight against Imperial Germany, Great Britain suffered from a tightening financial situation, certain core industries ill-suited to peacetime adjustment, calls for limitations in arms, imperial over-reach, and shifting strategic alliances. Canadians like John Ferris, Keith Neilson, Greg Kennedy, and Christopher Bell have been among the historians who have reassessed and revised understanding of the Royal Navy during the interwar years, a field previously dominated by the work of Stephen Roskill in his capacity as official and semi-official historian of the Admiralty and naval service. Harry Bennett, a reader at the University of Plymouth, synthesizes much of the existing scholarship and argues for a political economy approach that puts naval policy in the broader context of governmental, economic, diplomatic, and imperial imperatives, most particularly during the stewardship of Prime Minister David Lloyd George. He finds interconnectedness as the central tenet that draws together several important themes that anchor the Royal Navy in its time and various communities of interest.

The span and breadth of Bennett's survey acknowledges that it was a mere four years, the same length of time as the war itself. Great Britain and the Royal Navy emerged changed from that conflict, and the post-war period was equally important from beginning to end when naval policy had to keep pace with an evolving world and national circumstances. The first inconvenience was the alliance with Japan that had served Great Britain well since 1902 and became increasingly untenable as Japanese strength and power grew in the Pacific. The Royal Navy conceded any numerical competition with the United States Navy, in part to cultivate a special relationship with a close ally. Diplomatic conferences in Washington and London restricted the size, composition, and number of warships on behalf of signatory parties and gave certain security guarantees, at a time when money was in short supply. The Royal Navy, like most arms of government, was expected to live within its means as savings forced by the Treasury took effect. Building of new warships was deferred and in many cases curtailed, the Admiralty forced to argue and lobby for new classes of ships that would benefit from the lessons of the last war and meet new operational demands from aerial and sub-surface threats.

The impact on the domestic shipbuilding industry was dearly felt in regions of the country, where unemployment amongst workers and closing down of shipyards were the direct result. The Royal Navy's efforts to get the warships that it wanted dovetailed with concerns over social unrest, exodus to labour and socialist parties, and the government's rising bills for financial assistance at local levels. Naval shipbuilding became little more than a form of state-inspired welfare, even as the Lloyd George government continued to wring out as much financial room as possible for the national benefit. Bennett spends some time showing the connections between power brokers in parliament and the house of lords, the bureaucracy, the press, and higher leadership in the Admiralty, civilian and naval. The successes gained included a pair of new-build battleships and deferral of a naval arms race, which Great Britain could ill-afford. Still, Bennett sees failure in the inadequately defended Singapore naval base-starved of the necessary funds to complete its works-intended to hold on until a fleet arrived and weak position overall in regard to a resurging Japan in the years leading to the Second World War. Decisions made in the early 1920s came back to haunt the Royal Navy.

This book is a cheaper paperback release of the hardback previously published in 2016. The structure, pagination, and content are essentially the same. A number of tables grace the chapters, particularly in reference to shipbuilding. The cover reproduces a commissioned colour painting of British admirals from the period by the portrait artist Sir Arthur Stockdale Cope, which is explained fully in the afterward. First Sea Lord David Beatty is at the centre facing a portrait of Admiral Nelson, while others of certain fame and notoriety are placed in various poses in relation to each other. The artwork captures both the confidence and internal divisions and personal animosities amongst the Royal Navy's senior ranks. Bennett's book is a contribution to a few naval books on the list in the Bloomsbury Studies in Military History series, edited by Jeremy Black. The Royal Navy in the Age of Austerity 1919-22 provides a good primer on naval developments in the early interwar period and will appeal to a specialist audience and general readers interested in naval history.

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Richard Blakemore and Elaine Murphy. *The British Civil Wars at Sea*, *1638-1653*. Rochester, NY: Boydell Press, www.boydellandbrewer.com, 2018. xiv+225 pp., illustrations, maps, table, appendices, notes, bibliography, index, ship index, US \$115.00, cloth; ISBN 978-1-78327-229-7.

This fine book's genesis came from Blakemore and Murphy's sense that

there was no general maritime history of the English Civil War period. Overwhelmingly, accounts of the civil war address political matters and military operations. The fact that the King's navy aligned with Parliament and that there were no 'general fleet actions' ensured that the maritime aspect of the conflict was glossed over and assigned a subsidiary and nearly invisible role. Certainly, histories of the rise of Great Britain as an imperial power, or more general histories of the Royal Navy, noted developments during the civil war period (defined in this account as starting with Charles I's failed invasion of Scotland in 1638 and ending with the Commonwealth's defeat of Holland at the conclusion of the first Anglo-Dutch War in 1653), but these tend to be short and perfunctory. In contrast, the Anglo-Dutch wars, of which there were three from the 1650s to 1670s, have a much richer historiography as well as such seminal and noteworthy characters as Samuel Pepys, Admirals Robert Blake, George Monck and William Monson.

The authors provide an introduction to what war at sea involved in the beginning of the period, particularly by touching on the law of the sea (privateering, piracy, sovereignty at sea) as well as evolving warship technology, tactics and the growth of state navies. Prior to the seventeenth century, navies were, for the most part, a combination of 'royal' ships and contracted merchant vessels converted into warships for a specified period. The growth in numbers of the former represented a real change in approach, as well as with the administrative, financial and industrial elements that underpinned maritime power. This introduction is followed by two separate chapters that cover the civil war period by first exploring the conflicts early years and then moving to the

English Civil War proper involving the military campaigns of 1642-46. Two subsequent chapters cover the Parliamentary navy, its functions, its organisation, its personnel and then one on its opponents-the Royalist, Irish and Scottish maritime forces. The final two chapters complete the narrative on the civil war period, culminating with the execution of Charles I in 1649, and the vears of conflict thereafter to subdue the remaining Royalist interests in Scotland, Ireland and overseas in the British colonies. The navy was critical in all these campaigns. The ending of the book simply notes the British success over the Dutch in the First Anglo-Dutch War, which was comparatively brief and was triggered by the 1651 Navigation Act.

The book's conclusion notes the considerable evolution and growth of the British navy throughout the 14year period in question. Beginning as an ineffective force that was unable to prevent the Dutch ambushing a Spanish fleet under the nominal protection of Charles I on the Downs in 1638, the navy rose to pre-eminence in the mid-1650's when it was well able to hold its own against all comers-be they domestic foes or the Spanish, French or Dutch navies. As for the Civil War itself, the maritime aspect has been considerably underplayed in the historiography, with the authors clearly identifying the scale of the effort in mobilising naval forces, of authorising privateers, and in mustering the men, the ships and the campaigns in which they were deployed. The war's final outcome was clearly decisively concluded on land-at the Battle of Naseby-but Parliament's triumph was more than merely one of armies. The maritime contribution was of great importance and had a significant influence on preventing a Royalist revival, notwithstanding years of effort

both near and far from the British Isles. Indeed, it may be remarked that the role of maritime forces in Parliament's victory over the monarchy was similar to that of the Royal Navy over Napoleon some 160 years later. The set piece engagements such as Trafalgar were important milestones in that triumph, but the decisive factor was the application of sea power in the subsequent decade and a very effective blockade. Similar factors were involved here as the authors quite rightly describe. The authors emphasize that while this period involved a significant growth in the strength and effectiveness of the British navy, it should not be viewed as setting the stage for a subsequent unalloyed development into a peerless world power. The 1650s represent a high point, no question, but setbacks and missteps soon followed. Great Britain's evolution into a position of naval dominance had many waystations prior to its nineteenth-century apogee.

The book is comparatively short and includes two useful appendices, a timeline and a tabular analysis of the Parliamentary navy. The bibliography demonstrates the sound research on which the book is based, notably the impressive use of primary sources throughout, both published and in various archives. The list of secondary sources is comprehensive and is a useful starting point for anyone interested in further explorations of the period. There are a few black and white illustrations that accompany the text.

The only negative is that of price. At \$115.00 US, the cost is beyond the purse of most and is hence largely for libraries. With that caveat, I have no hesitation in recommending this volume to any who are interested in this period.

Ian Yeates, Regina, Saskatchewan Sheila Bransfield. *The Man Who Discovered Antarctica. Edward Bransfield Explained—The First Man to Find and Chart the Antarctic Mainland*. Barnsley, S. Yorks: Frontline Books, www. pen-and-sword.co.uk, 2019. xviii+318 pp., illustrations, notes, bibliography, index. UK £25.00, US \$49.95, cloth; ISBN 978-1-52675-263-5. (E-book and Kindle available.)

Most visitors to Antarctica, whether scientists, professional mariners or tourists on an expedition cruise ship, will have their first encounter with the seventh continent in the area of the Bransfield Strait, but only very few will have heard about the man behind the name of the strait that separates the South Shetland Islands and the Antarctic Peninsula. Regardless of whether Edward Bransfield was really the first man to sight the Antarctic continent, or if Fabian Gottlieb von Bellingshausen sighted the continent in the region of East Antarctica two or three days earlier, Bransfield was one of the most important early explorers of the frozen continent. The big names from the heroic age of Antarctica like Scott, Amundsen or Shackleton have definitely overshadowed those of Bransfield or v. Bellingshausen, but without knowing the early history of Antarctic exploration, the story of the continent would remain incomplete, lacking an important early element.

Sheila Bransfield aims to overcome this knowledge gap in Antarctic exploration with her book about her distant relative, Edward Bransfield, while at the same time putting him on the proverbial pedestal. Tracing his life from his very early beginnings as a mariner, she provides a meticulously researched account of Bransfield's achievements. While there is no doubt that she has made excellent use of her sources, it might be asked if she were not overdoing it, and perhaps missing the larger context or the real, relevant questions to be posed by a historian interested in this part of Antarctic history.

Even when reading the introduction, sometimes bordering on namedropping of assorted international academic associations and institutions, the reader gets the feeling that the main goal of the book was not only humble historical research designed to fill out the existing body of knowledge, but also to ensure Edward Bransfield's place in the "Hall of Fame" of Antarctic exploration. One might question whether the plethora of details provided really presents a better and more analytical understanding of Bransfield's contribution to Antarctic history. For example, learning about impressment, which Bransfield suffered at the beginning of his naval career, does not really help to understand his Antarctic achievements, and only readers with some previous maritime knowledge will know the details of this inhumane practice. The same criticism applies to many other instances where the author provides so many details about various topics that they easily distract from the main story.

In the end, the identity of the intended readership might be the most critical question for the whole book. If the book is aimed at professional historians, are all the details on side-aspects only loosely related to Bransfield's Antarctic achievements are really necessary? If intended for casual readers generally interested in Antarctic and maritime history, so much detail combined with a somewhat dry and scholarly writing style distract from an interesting biography which deserves to be told as a story of exploration. The author seems unable to really decide between these two extremes and fails to deliver a convincing mixture of the two approaches.

The main issue I had with the book is simply an issue of bias or the author being too personally engaged with the subject. For example, the title of the book indicates the author's ambition to recognize Bransfield as the man who discovered Antarctica. While she certainly delivers on this goal, it should be stated that Edward Bransfield's contribution to the history of Antarctica as told by Sheila Bransfield is a little larger than it actually might have been. More importantly, her choice of the socalled 'great men' approach seems a somewhat outdated analytical concept for historical research. This is particularly true whenever a ship is involved in an historical event, since the entire crew, rather than just the navigator or commanding officer, deserves credit for the achievement.

Despite these critical observations, I can at least recommend the book to historians interested in the early history of Antarctic exploration. These readers will know how to read the book and to make use of the author's extremely detailed research, even if not agreeing with the approach. Fortunately, the publisher has kept the price reasonably low at £ 20.00 for the hardback and £ 3.99 for the electronic version. This makes it easier to justify adding it to any library (private or institutional) with a section on Antarctic history.

Bransfield's book on Bransfield might not be the ultimate book on the early years of Antarctic exploration, but the author should be congratulated for shedding light on a period of Antarctic exploration that is way too often overshadowed by the later heroic age of Antarctic exploration. Meanwhile, the early exploration of Antarctica still awaits a comprehensive analytical history—one that puts Edward Bransfield in his proper spot and for which Sheila Bransfield's book will be, without any doubt, a relevant and important secondary source.

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Kevin Brown. *Fittest of the Fit. Health and Morale in the Royal Navy, 1939–1945*. Barnsley, S. Yorks: Seaforth Publishing, www.pen-and-sword.co.uk, 2019. xi+276 pp., illustrations, appendices, notes, bibliography, index. UK £25.00, US \$49.95, cloth; ISBN 978-1-5267-3427-3.

Royal Navy sailors have long occupied a special place in the British public imagination. Whether dressed in the 'slops' of the eighteenth-century or the distinctive square-rigging of the world wars, 'Jack' has been an icon of British imperial power for over two hundred years. As the columnist Ian Jack wrote in 2016, "it was capstans, sailors and sailing ships that decorated cigarette brands rather than rifles and hussars."

In Fittest of the Fit, Kevin Brown argues that the reputation of the British naval sailor was at its peak in the 1930s. Naval recruitment posters showed "handsome, healthy, sun-tanned men" far removed from the overcast slums of industrial Britain, and numerous films depicted Jack as "wholesome and resourceful" (1). Despite the positive image, however, in 1939, the Royal Navy's medical services-reduced by austerity cutbacks-were hardly ready to maintain the health of the Navy's men or confront the realities of combat. The challenges faced by the Royal Navy and its medical officers during the Second World War, and how the Navy responded to them, is the subject of Brown's book.

Royal Navy medical officers of the Second World War experienced similar challenges and hardships as faced by

their First World War predecessors: long periods of idleness; uncertainty about their non-medical responsibilities; the shock of combat. But there were many differences as well. The unique physical and psychological stresses associated with aircraft carriers and naval aviation, for example, were just becoming apparent at the end of the 1914-18 war. Increases in the fighting power and strength of Second World War ships, and the development of radar, Asdic high-frequency-direction-finding and equipment "all required more space at the expense of personal space for the seaman... (71). The overcrowded and cramped conditions also made it more difficult to maintain a healthy and sanitary environment, the most important duty for the medical officer.

The maintenance of health was also compromised by lower-deck living arrangements that "would have been all too familiar to the Jack Tar of Nelson's navy" (81-2). Rats were still a feature of shipboard life in the Royal Navy during the Second World War, as were hammocks, which were sometimes shared by two men on opposite watches. The practice of 'broadside messing' also remained the norm, under which each mess member took his turn as cook, server and dish washer. While the system "may have sustained the solidarity of the mess and continued a long tradition," Brown notes that it also resulted "in a poorly-cooked, unbalanced meal." The medical reports studied by Brown yield a variety of details about lower-deck life such as these, and his use of them to reconstruct the social world of the ordinary rating is one the book's greatest strengths.

The responsibilities of the medical officer are discussed in a variety of contexts—preventative medicine, battle, naval aviation and submarines—but one of the most interesting (and disturbing)

was his treatment, or rather suppression, of mental health issues. As Christopher McKee wrote in Sober Men and True, there were "powerful expectations on the part of the sailor's peers, his officers, and the Royal Navy that he would deny any fear as he worked in that dangerous everyday world" (118). While McKee was discussing the First World War, Brown demonstrates that attitudes had changed little by 1939, and it was only after 1943 that the Navy "recognized that sailors might be suffering from 'fatigue'..." (137). Treatment for trauma prioritized denial, suppression and rapid reintegration, and medical officers were "themselves under pressure to keep ships' companies at their duties and were at times discouraged from reporting psychiatric cases. They are told that 'back to duty as soon as he can do a reasonable day's work must be your constant aim." (147)

At times, Brown also draws attention to the health of merchant seamen. His insights here are particularly interesting, and while outside the scope of his research Fittest of the Fit would have benefited from further consideration of this 'sister service.' Unlike the uniformed members of the armed forces, Brown points out, merchant sailors were largely left without state support, even when the loss of their ship left them destitute and homeless. The crews of torpedoed merchant ships, Brown writes, "often had to depend on missions to seamen, charitable clothing depots, charities for the Merchant Navy, such as the Shipwrecked Mariner's Society, and the generosity of individuals for accommodation and clothing ... " (180-81). In the midst of a world war, the British state still depended on Victorian working-class institutions to provide aid to its merchant sailors.

A more serious omission is the health of the Women's Royal Naval

Service (WRNS). While Brown alludes to the creation of a medical service for the WRNS he does not explore it any further, and 'wrens' are sometimes portrayed in a way that is unfair and even condescending. Women were apparently "keen to join the wrens" so that they could "don the stylish uniforms" and escape more difficult work in the factories or the Land Army (16). Brown believes that this "misguided patriotism" (16) led women to withhold personal details that may have disqualified them from service, without acknowledging that the practice was common for male recruits as well, or considering the unequal power relationship between a male physician and a female volunteer. Medical screening must have been an uncomfortable, intimidating and indeed, violating experience for a wren, and it is not surprising that some information was withheld.

As Brown points out in the preface, the study of health and medicine in the Royal Navy of the Second World War has advanced relatively little since Jack Coulter's two -volume history of the subject, published in 1954 and 1956. In this sense, *Fittest of the Fit* is a welcome addition, but hopefully it is just the start.

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R.A. Burt. *The Last British Battleship. HMS* Vanguard *1946-1960*. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2019. 128 pp., illustrations, tables, appendices, bibliography. UK £35.00; ISBN 978-1-5267-5226-0.

Aidan Dodson. German Battleship Helgoland. Detailed in the original builders' plans. Barnsley, S. Yorks: Seaforth Publishing and the National Maritime Museum, www.seaforthpublishing.com, 2019. 144 pp., illustrations, tables, bibliography. UK £30.00, cloth; ISBN 978-1-52671-873-0. (E-book available.)

First of all, Seaforth should be commended for publishing works on these two ships, as neither of them can be considered "historically" or "technologically" significant when compared to HMS Dreadnaught, SMS Goeben, USS Missouri, Bismarck or Yamato, to name a few. Yet together, these books cover the story of two battleships that mark the beginning and the culmination of the history of the type, from 1906 -1918 and 1944-1960. Since both volumes were released at almost the same time and cover the same type of ship, it seems fitting to combine them in a joint comparative review rather than individually. Although designed in different eras, in their time each ship represented its respective navy's needs, design capability and perceptions of the ideal characteristics of battleships. One of the ironies is that both battleships, admittedly due to different reasons, were devoid of aircraft facilities. Of the two authors, R. A. Burt is perhaps the best known as a professional naval historian and we can see this volume as the cumulative volume in his series of works on the battleships of the Royal Navy (RN). While not as well known, Aidan Dodson has made a reputation for himself as a naval historian, although he is actually an Egyptologist and a former employee of the (UK) Ministry of Defence. Neither of these books is indexed, and their bibliographies are very limited. Although Burt's does have two appendixes, they are not really significant. Both books feature some very large foldout drawings which are very well done.

Visually, the most striking aspect of these volumes is that their attractive dust-jackets that dispense with the tra-

ditional glossy photo-type paper that is traditionally used by this publisher. Instead, they are printed on a more matt type of paper stock. Both are relatively slim, folio-sized publications feature drawing and illustrations of their subject's structures and components. Unfortunately, some of the larger drawings are slightly distorted or lost when they encounter the folds of their spines. In general, there seems to have been a better effort to limit this perhaps unavoidable failing in Dodson's volume-but nonetheless the details of some of his drawings are also lost as they overlap the spine.

The major differences of these volumes are to be found in their structure and focus. On the one hand, Burt's volume is a traditional work, encompassing a detailed text that is ably complemented by photos and detailed illustrations. Indeed, only Burt makes extensive use of photographs, tracing the history of HMS Vanguard in an essentially chronological order from the first design proposal to her ultimate scrapping. His text is clear, and although he occasionally covers more complex subject matters, it is easy to understand. Overall, it is a very "busy" work with text, photos and illustrations occasionally sharing the same page.

On the other hand, given its different focus and genesis, Dodson's work can be best described as a collection of very detailed drawings of each section of the SMS *Helgoland* that are ably supported by a good, but very brief, history of her class and a selection of a few relatively generic drawings and an extensive collection of reproductions of "designer drawings". Although his text is much more succinct than Burt's, it does cover the Imperial Germany Navy's various design choices and the influence of both the HMS *Dreadnought* itself and that of Germany's first dreadnoughts, the *Nassau* class, on the design of the *Helgoland*.

Somewhat surprisingly, it seems that the choice of armament for both Helgoland and HMS Vanguard arose from design restraints and availability. In the case of the Helgoland, the Imperial Germany Navy realized it had to move from the 280 mm (11") guns of the Nassau class because it recognized the fact that all the major foreign navies had begun to standardize on a 305mm (12") gun. In accepting this increase in armament, however, the government was reluctant to further increase their cost by changing the turret arrangement. Consequently, Helgoland and her sisters retained the Nassau's relatively inefficient hexagonal layout for their main armament. A German shipyard contracted to build one of the Helgolands decided that it would try to shorten the construction period for its assigned ship by pre-ordering some of its equipment ahead of time. The British popular press quickly seized upon this as an indication that Imperial Germany had no intention of respecting its own naval building laws. This misinterpretation helped to trigger the "Naval Panic of 1909".

As for the Vanguard, its genesis occurred in 1939. At that time, the RN was coming to grips with the fact that the ships of their next class of battleships, the *Lion* class, would probably not be completed in time for the next major war. Then, in March, of that year, someone remembered that the RN had four twin 380 mm (15") turrets and matching guns held in storage. They had been removed from the large First World War cruisers HMS Glorious and HMS Courageous when they were converted to aircraft carriers. These mountings could be used to expedite the construction of a much-needed new battleship that could be available before

any of the *Lions*. By 1941, the Admiralty had no choice but to cancel work on the *Lions*, but it officially sanctioned a design for a new battleship that would use these mountings. In general, the *Vanguard* can be described as an improved *King George V* battleship whose design was influenced by that of the *Lions*. By 1944, construction slowed when it was realized that she would no longer be needed to counter any of the remaining Axis battleships.

In general, both books cover the history of their subject vessels adequately, but Burt's coverage is much more detailed. He provides a summary of all of the Vanguard's deployments, armament, equipment updates and participation in fleet-day events. He also briefly compares her to her immediate contemporaries, the last battleships built by France (Jean Bart) and the United States (USS Missouri). He also compares and contrasts her design to that of the King George V class and the *Lions*. While the general arrangement, illustrations, and detailed drawings of the Vanguard's turrets and radar and other structures and equipment are excellent, they clearly pale in comparison to those found in Dodson's work.

Although Dodson's coverage is less-detailed, he does provide a decent summary of the design, construction and use of the *Helgoland* and her three sisters during the First World War and their subsequent fate. This includes coverage of the sinking of the SMS Ostfriesland by US Air Force Commander General Billy Mitchell, noting that she was leaking prior to the tests, and that some of her waterproof doors had been removed prior to the bombing tests. Ostfriesland was sunk during the second day of tests, when Mitchell ignored orders to observe a lull between tests to allow United States naval officials to make interim bomb damage assessments. Dodson also notes that, in many cases, the structural strength of most of the major Imperial German warships was severely compromised by their submerged torpedo facilities. Probably wisely, the author also avoids discussing what modifications Germany could have made to the *Helgoland* and her other remaining early dreadnoughtshad she been allowed to retain them after the First World War. Naturally, this would have been contingent on the High Sea's Fleet not scuttling itself at Scapa Flow in 1919 and the Allies actually permitting Germany to retain them, which is still very doubtful.

Both books feature detailed drawings of their subjects but, there is no doubt that drawings are the raison d'être for Dodson's book. It is essentially a collection of large-scale designer drawings of Helgoland and occasionally, her sister ships, reproduced from stern to stem by section numbers. Each drawing is accompanied by a key, and one would be hard-pressed to find any missing detail. One striking feature of Dodson's work is the printing of page numbers in red, a wise choice that enables readers to distinguish pages from the numbered keys to the drawings. In general, Dodson's book and the others of this series can be seen as an improved version of the famous "Anatomy of the Ship" series, with a greater focus on detailed drawings, but without photographs.

Overall, the text of both volumes is adequate and very readable, although Burt's is more informative, but this not surprising given the different design context of these volumes. The real strength of Burt's volume lies in its collection of photographs, while Dodson's is essentially the drawings. The latter volume does suffer from its complete lack of photographs, and most general readers would probably have a wanted to see at least one full-colour profile illustration of the *Helgoland*. In general, Burt's volume should be far more appealing to both general and specialist readers, while Dodson's will probably find its following in a much more specialized niche of warship aficionados. Given that it is the fourth volume of this type to be released by Seaforth publishing, they clearly feel that they have a winning format here. Despite their differences, both of these volumes should find their way into the libraries of battleship buffs and perhaps modelers as well.

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Michael Crawford (ed.) *Needs and Opportunities in the Modern History of the U.S. Navy.* Washington, DC: Naval History and Heritage Command, www. history.navy.mil, 2018. vii+419pp., illustrations, tables, appendices, notes, bibliography, index. US \$82.00, cloth; ISBN 978-1-943604-11-1.

American naval history is weighted towards the twentieth century. The titles of papers presented at the largest biannual gathering of American naval historians, the McMullen Symposium in Annapolis, Maryland, demonstrates this fact. The majority of the papers focus on either the era of the two world wars or the Cold War, while a few examine the nineteenth century. Needs and Opportunities In the Modern History of the U.S. Navy calls upon scholars to devote attention to the post-Second World War navy, especially the post-Cold War navy. In 2016 and 2017 Michael Crawford, then Senior Historian at the Naval History and Heritage Command, organized a series of talks on the historiography of various aspects of modern American naval history. Expanded

versions of these papers were collected and edited to create this volume, a useful and wide-ranging survey of the literature and needs of modern American naval history.

The volume covers eight topics: forward deployment, operations, personnel, acquisition, science, social history, strategy, and technology. These topics were chosen because of their value to current Navy leaders, and therefore, their potential to inform Navy decision-making and thinking. This framework reflects the Command's vision: "to serve our nation, by using the power of history and heritage to enhance the warfighting capability of the U.S. Navy." Historians tend to view the Command as an archive and source of historical information. This is only part of the Command's mission which is also to provide practical historical support to the Navy today and to manage the Navy's museums and the Navy's collection of historical artifacts.

All of the chapters summarize the existing literature on their topic before identifying gaps which could be fruit-fully filled by historians. A common theme that runs throughout the chapters is the problem posed by classification. Many, though not all, of the Navy's late Cold War records remained classified and must go through a lengthy, declassification process before being opened to the public. The situation is even more challenging for post-Cold War topics which have not yet reached the earliest mandatory declassification point, 25 years.

Thomas Mahnken surveys the literature on forward presence, the practice of deploying and maintaining naval forces at a distance from the United States. He also offers alternatives to the Navy's current deployment model while highlighting the costs and challenges of maintaining large numbers of expensive, highly capable ships on station overseas.

Donald Chisolm describes how the Navy has ceded a level of control over its personnel policy to the Department of Defense in response to increasing demands for jointness. At the same time, the Navy's traditional ambivalence toward professional military education and emphasis on the divide between officers and enlisted personnel has endured.

Thomas Hone's chapter on acquisition provides a wide-ranging survey of the literature on military acquisition in modern America. He notes that political scientists, journalists, and former officials have produced more work on this topic than historians. Recent works in the Defense Acquisition History project, however, have shown what historical studies of acquisition can and should accomplish. (In the interest of full disclosure, the reviewer was previously involved in this project).

Gary Weir's chapter on science argues that the scientific community is the Navy's "most significant partner" and emphasizes the need for historians to examine the professional cultures of naval officers and scientists. Such examination would allow historians to better study the interaction between these two groups. The chapter notes that some scholars criticize naval funding of science for its distorting influence on scientific inquiry. Gary Weir notes that these critiques have merit in some instances but less in others. He highlights several works on science and the Navy that have relied almost entirely on scientific, not naval, sources to their detriment.

Edward Marolda understands the US Navy's social history as the pursuit of equality within the Navy by minorities. He argues that progress has been slow and calls for a general social history of the Navy. The chapter outlines the current literature and emphasizes the opportunities for research on two specific topics: women and Africa-Americans in the Navy.

Sebastian Bruns' chapter on national strategy emphasizes the foundational work done by Peter Swartz and John Hattendorf who have published documents and surveys on the Navy's strategy in the late-Cold War and post-Cold War years. The chapter notes that studies of the Navy's approach to strategy are particularly challenging due to the Navy's orientation: "the Navy is fundamentally about operations" (282) as opposed to strategy.

Mark Mandeles begins with a survey of the literature on the Navy and technology before identifying a number of sources of such studies including the Defense Science Board. He emphasizes the need to examine the organizations and institutions that perform research on technology and integrate technology into the Navy. He concludes by highlighting the value of interdisciplinary groups, such as those at the RAND Corporation in the early Cold War, to study topics of interest to the Navy, such as technological development.

This volume is available on the Command website and would be most useful to scholars interested in doing naval history. In particular, graduate students looking for masters or doctoral topics should find considerable value in this volume.

Corbin Williamson Prattville, Alabama

Norman Friedman. *British Submarines in Two World Wars*. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2019. 452 pp., illustrations, notes, bibliography, appendices, submarine data, submarine list, index.

## UK £40.00, US \$88.00, cloth. ISBN 978-1-5267-4767-9. (E-book available)

"A damned un-English weapon" is what Sir Arthur Wilson, the Third Sea Lord, reportedly proclaimed when he acceded to George Goschen's desire to order the Royal Navy's first submarines. Yet the five Holland boats purchased from the Electric Boat Company in December 1900 became the foundation of a force that by 1914 was the world's largest, going on to serve with distinction in two world wars. While numerous books have been written about the daring exploits of these vessels and their crews, the boats themselves have not received the same degree of attention lavished on the design histories of the battleships, aircraft carriers and other ships of the Royal Navy. This deficit has now been rectified by Norman Friedman, who turns his formidable scholarly attention to chronicling the evolution of British submarines from their first small craft to the sophisticated boats developed based on the lessons of two wars fought across the oceans of the world.

While Friedman's book surveys nearly a half-century of submarine design, he devotes the first third of the text to the development of British submarines in just the fifteen years leading up to the First World War. This involves a careful detailing of not only the evolution of submarine design and construction, but the sometimes protracted haggling over patents and rights to the newly-developed craft. The submarine's emergence during this period reflected a series of simultaneous technological triumphs, as the recently-invented internal combustion engine along with John L. Holland's resolution of the persistent buoyancy issue together made underwater vessels practical for the first time. Subsequent innovations, such as the addition of periscopes,

further added to the submarine's effectiveness. Working with Vickers which, as Electric Boat's licensee in Europe, could use Holland's patents in their designs, the Royal Navy soon ordered several different classes of submarines for their fleet. Much of Friedman's story in these chapters is of experimentation in search of a satisfactory combination of attributes, an effort that was complicated by the navy's inability to settle on a mission for these new craft. Would submarines be employed primarily for harbour defense? Short-range patrol? Fleet operations? As the rapidly advancing technology expanded the possibilities of what submarines could accomplish, the Admiralty explored the full range of alternatives, all of which required designs with significantly different specifications. Because of this, by the start of the First World War the British possessed an eclectic force of submarines designed for everything from harbour operations to ocean travel, reflecting differing theories awaiting resolution by the test of experience.

Friedman extends the story of experimentation into his chapters on British submarines during the conflict, describing how, through practice, the British gradually settled on how best to employ their new weapons of war. As the submarine settled into its primary role as ocean-going ship-killers, the British focused on designing larger submarines with the endurance and habitability necessary for extended patrols. This culminated in the "L" class, an elongated version of the prewar "E" class that was the mainstay of the submarine force during the war, yet the defeat of Germany soon forced designers back to the drawing board. Germany's loss meant the most likely threat to British naval supremacy would come from Japan, and engage the Royal Navy in conditions very different from those in

which submarines previously operated. Therefore, a new class of submarine was developed—the "O" class—that was better suited for distant patrolling and tropical conditions than previous designs.

Any new boats had to be built, however, within the constraints of postwar circumstances. With Britain's finances depleted by the war, a succession of governments turned to arms control as a means of reducing defence expenditures without jeopardizing national security. These efforts extended to submarines, with even King George V calling for their total abolition after Britain's narrow escape from Germany's U-boat blockade. While abolition was rejected, the prospect in the 1920s of tonnage limits stimulated the development of new submarines, most notably the "S" class. As the prospects for war grew in both Europe and the Far East in the 1930s, the Admiralty ordered new classes of submarines, the "T" class attack boats and the smaller "U" class boats for training and short patrols. As a result, the Royal Navy entered the Second World War with a large and diverse fleet of submarines, which they further built up both with repeat orders of existing classes and new designs such as the "A" class, which would continue to serve in the fleet well into the post-war era.

Friedman details the evolution of British submarine design in a text supplemented with numerous photographs and diagrams of the boats described in it. The amount of scholarship on display is impressive, reflecting a considerable amount of archival research as well as Friedman's own extensive familiarity with his subject. Thanks to his labours, this book can stand alongside Friedman's other histories of British warship design as the definitive history of its subject—and with a promised second volume to come that will cover the history of British submarine design in the post-war era, one that will become part of a comprehensive overview that no scholar in the field can afford to ignore.

Mark Klobas Phoenix, Arizona

William H. Garzke Jr., Robert O. Dulin Jr., and William J. Jurens, with James Cameron. *Battleship Bismarck: A Design and Operational History*. Annapolis: Naval Institute Press, www.usni. org, 2019. x+610 pp., illustrations, photographs, maps, tables, appendices, notes, bibliography, index. US \$95.00, cloth; ISBN 978-1-5911-4569-1.

*Battleship Bismarck* is a big book that delves into the fateful life of the famous German battleship from its inception to demise at the hands of the Royal Navy. Named after Otto von Bismarck, nineteenth-century Germany's first Chancellor and master political strategist, the warship was a potent symbol of naval power under the Nazi regime of Adolf Hitler during the Second World War. Almost too precious ever to be used, Bismarck reflected the lingering ambitions of the German naval staff to have a fleet of large surface units to match Germany's opponents and the reluctance of the land-centric polity to understand and employ the navy properly in a combined fashion with the air force and army. The warship and its crew sallied out on a mission of no return. Sister ships Scharnhorst and Tirpitz, the British Prince of Wales, as well as the Japanese super battleship Yamamoto succumbed to equally spectacular and tragic sinkings. The search for and discovery of Bismarck's final resting place at the bottom of the ocean in 1989 by Robert Ballard, discoverer of the Titan-

ic wreck, and subsequent deep-sea filming by Canadian movie director James Cameron gave the Nazi battleship a certain notoriety in documentaries and on specialty channels. William Garzke and Robert Dulin, a pair of naval architects, and William Jurens, a university graphics engineering instructor, shared a lifelong fascination with Bismarck and worked as consultants with Cameron. They founded and belong to the marine forensics committee affiliated with the Society of Naval Architects and Marine Engineers (SNAME). Research and compilation for the book, which pre-dates by several decades the committee and ocean dives, comes together to provide an almost definitive examination of the German warship from beginning to end.

What sets Battleship Bismarck apart from most books dealing with major capital ships is the depth of technical knowledge and analysis applied to the topic and details that place the warship in its era and particular operational context. Chapters in the first hundred pages describe the effect of interwar naval arms limitations on battleship design and construction, building, launch, and commissioning of Bis*marck* at the Blohm and Voss shipyard in August 1940, work-up and sea trials before becoming fully operational, and the Kriegsmarine's actions during the first years of the war in cruiser warfare and support to seaborne invasion in Scandinavia and plans against Great Britain contingent upon success of the Luftwaffe. The large German warship incorporated a number of innovative and interesting features, particularly regarding armaments, habitability, fuel arrangements, and propulsion, to allow operations in the Atlantic Ocean for up to three months at a time. Without informing Hitler first, the German naval staff planned a major operation known as Rheinübung to have a combination of major surface ships supported by submarines range into the North Atlantic to attack shipping. Most convoys were escorted by a single battleship or battlecruiser, and having a battleship like Bismarck included in the package put the odds in Germany's favour. The Kriegsmarine, however, lacked supporting air power because inter-service rivalries delayed completion of the aircraft carrier Graf Zeppelin and intended operating areas were beyond the range of land-based maritime bombers stationed in Norway and France. Aerial reconnaissance and signals intelligence allowed the British to track the movements of Bismarck and its consorts to Norway and then toward the Denmark Strait, sufficient for British warships to be mustered and searching. Middle chapters recount the encounter between opposing naval forces and the gun battle that set off an explosion aboard HMS Hood and its quick sinking. The authors assess that loss of the older British battlecruiser represented more than just a lucky shot, hits inflicted on the newest battleship Prince of Wales were significant, and damage to Bismarck was manageable, though it affected the critical factors of speed and endurance. Hitler, now aware and not particularly happy about the naval operation, ordered the warship home. Due to British ship dispositions, return to Norway, the shortest route, was too risky and the admiral aboard *Bismarck* decided to head for France. The next chapters describe the pursuit by the Royal Navy that featured air strikes that crippled and slowed down *Bismarck* in order to allow superior surface forces to catch-up and deliver a knock-out blow. Four chapters cover the final battle from almost every angle and phase that saw Bismarck pummeled and hit by shell fire and torpedoes. The authors note

that the design stability inherent in the German warship delayed sinking and caused greater loss of life from direct and indirect British fire as the crew tried to leave the ship. The Royal Navy's major warships were short on fuel from the chase and immediately departed after the battle, leaving cruisers and destroyers to pick up survivors from the oily waters. A patrolling U-boat found three men in a life raft afterwards, who returned to Germany and received a personal debriefing with Hitler.

The final chapters, perhaps the most interesting in the book, detail what happened after *Bismarck* slipped beneath the waves. With the aid of original ship models and coloured photographs taken underwater from Cameron, the authors painstakingly assess the battle damage on the wrecked warship peeling back, like an onion, the various layers of operational encounters and the final plunge through the water column to the seabed. Bismarck capsized and sank bow first as the stern detached and several turrets dropped, hitting the side of a seamount right-way up and then sliding down a slope across its own debris field before coming to rest. Rusticles, icicle-like microorganism phenomena identified by Ballard, are slowly eating away at the damaged sections of the warship where steel was exposed. Pairs of boots and leather clothing littering the seafloor testify to long dead crew members that went down with the warship. Accounts of survivors, used by the authors to verify certain facts and technical aspects, supplement the analysis. The British destroyer Cossack plucked a soaked and bedraggled black and white cat from floating debris who was renamed Herr Oscar and promptly joined the ship's company. Most of those who survived the battle and frigid waters to be rescued by the Royal Navy were destined to spend the rest of the war in captivity

as prisoners of war in Great Britain and Canada. Josef Statz and Burkard Baron von Müllenheim-Rechberg, the highest ranking officer to live, each wrote their own personal tales of *Bismarck* and interacted with the authors over many years. The enduring question whether the crew scuttled or the British sank the German warship really does not matter one way or another.

The format and production quality of the book are very high. The glossy pages provide for very clear photographs in colour and black and white, which are distributed generously throughout the book. Chapter numbers and headings have stylized ship silouettes. Many tables, maps, and course plots accompany the text. The comprehensive 20-page index is impressive in detail and scope, and very well-laid out for reference purposes. *Battleship Bismarck* is a heavy book both by weight and serious content.

Chris Madsen Toronto, Ontario

Frederick H. Hanselmann. *Captain Kidd's Lost Ship. The Wreck of the Quedagh Merchant*. Gainesville, FL: University Press of Florida, www.upress.ufl.edu, 2019. xxii+198 pp., illustrations, maps, tables, chronology, bibliography, index. US \$85.00, hardback; ISBN 978-0-830-5622-7.

Archaeology, or a derivative of the word, is used in six of the seven sentences of the introductory paragraph of *Captain Kidd's Lost Ship: The Wreck of the Quedagh Merchant.* Yes, Frederick Hanselmann leads the reader on a deep dive into the theoretical and practical application of archaeology as practiced on an ever-diminishing resource, a shipwreck. This monograph explores the complexities of the myth and reality of the privateer/pirate Captain Kidd through the examination of contemporary textural materials and the evaluation of artifactual evidence from a Caribbean shipwreck site. That research is combined with modern scientific analysis which aids determining truth from fable. And while many archaeology studies result in a report after the complete excavation of a site, Hanselmann's study is concluded with a well reasoned argument for preservation of such a unique resource by leaving the remaining archaeological material in situ to develop a publicly-accessible, protected marine area.

The book's initial chapter is theory heavy, letting the reader know that the following is going to be an academically-based study, not a romantic rehashing of a story that has built up a mythology of its own. The following two chapters are a dive into the actual history of Kidd and his times, deconstructing global, national, regional and individual systems to gain a better perspective on the significance of the remains of the Quedagh Merchant. Hanselmann exposes the reader to multiple networks in the Americas, Britain, Madagascar, and south Asia. These factors contribute to the story of a vessel that was constructed in India and was part of trading system that intertwined Armenian merchants, the English East India Company and the Mughal Empire of India, and which was ultimately scuttled in the Caribbean Sea after a cruise through the Indian Ocean. The fourth chapter is the stuff of a more typical archaeological investigation and identification. Utilizing the historic record in conjunction with the remaining archaeological material, Hanselmann makes a credible argument that the shipwreck examined is, indeed, that of the Quedagh Merchant. The final chapter presents a pragmatic and inventive way of both protecting and

preserving a rare archaeological site by exposing it to the vagaries of market forces, tourism. A well thought-out and integrated program involving local, regional, national and international input has been created to develop a unique economic and educational opportunity for the local community as well as the multitudes of foreign tourists who visit the Dominican Republic. Captain Kidd's Lost Ship demonstrates how a well researched, planned and executed archaeological project can contribute to the continued interface via preservation in situ of a site with the community in which the archaeologists were privileged to work. Is that not what one of the ideals of archaeology is, to expose the broadest constituency to the knowledge gained from research?

Some readers may find the volume a bit pedantic, archaeological theory is presented, discussed and deliberated. But that is because this study is not just the examination of physical remains of a shipwreck, but the process used to scrutinize and determine what the proper course of action to take regarding them. Illustrations and mapping are two components that assist in constructing a strong archaeological document. The initial figure, identifying the project area, is of poor utility for easy site location. All the images in the text are in black and white, which for the untrained eye may appear similar to Rorschach tests, especially for the mosaic, 3-D photogrammetric models and site images. Better mapping, the use of colour, or other modifications to the images to help differentiate cultural from natural features could add informational value. These issues are minor, considering the intent of the text is to demonstrate the historical archaeological processes that were conducted in order to make decisions regarding the treatment of the in situ remains of a singular wreck site.

With this monograph, Dr. Hanselmann demonstrates that he is a deft practitioner of both the theoretical aspects as well the practical application of methods and techniques in the field of maritime archaeology. This study is not for the casual reader, shipwreck hunter, or pirate enthusiast. It is a solid and well researched archaeological study with firm foundations for its conclusions and suggested post-excavation activities for a unique site. Practitioners of maritime/nautical archaeology will find this volume useful for theoretical perspectives and post-field site activities. Captain Kidd's Lost Ship, should also make valuable contribution to the reading list of any serious student of maritime archaeology.

Michael C. Tuttle. Clarksville, Tennessee

Brian Lane Herder. US Navy Battleships 1886-1898. The pre-dreadnoughts and monitors that fought the Spanish-American War. Oxford, UK: Osprey Publishing, www.ospreypublishing.com, 2019. 48 pp., illustrations, tables, bibliography, index. UK £11.99, US \$19.00, CDN \$25.00, paper; ISBN978-1-4726-3502-4.

This colourful, compact, yet comprehensive book describes the six monitors, two second-class battleships and four first-class battleships that took part in the 1898 Spanish-American war and also four more monitors that were ordered as a result of public concern over what was seen as lack of defence for East Coast ports. The background to the development of the "New Navy" is first discussed along with a description of the naval weapons of the time. The following chapters describe in turn the monitors, the second-class battleships *Maine* and *Texas*, the *Oregon* class first-class battleships and the *Iowa*. The illustrations include many contemporary photographs, excellent profiles in colour of all classes and reproductions of paintings, including action scenes. Tables provide details of the ships' technical specifications while brief discussions of their design, their positive qualities and their drawbacks, provide a wealth of information in compact form.

After describing the ships, the author recounts the events of the war. The destruction of the Maine in Havana harbour, believed at the time to be caused by a Spanish mine, was used as the proximate cause of the war. (Subsequent analysis has determined that it was probably accidental). There was no space in this slim volume for detailed discussion of fleet deployments but there were bombardments of ports in Cuba and Puerto Rico when the monitors, which had been built for coastal defence, assumed the role that type of warship would play in both World Wars. Finally, we have the Battle of Santiago and the destruction of Admiral Cervera's squadron (Almirante Pascual Cervera y Topete). This reviewer cannot resist mentioning that one of his great-uncles was serving in the USS Texas on that occasion. It should be noted that neither of the American flag officers, Rear-Admiral William T. Sampson and Commodore Winfield Scott Schley, used any of the ships described in the book as their flagship, preferring instead the armoured cruisers USS New York and Brooklyn, probably because of their speed.

The book ignores Commodore Dewey's victory at Manilla because none of the ships described were present, but two monitors crossed the Pacific to reinforce him. They were too late to fight the Spanish but were employed against the Philippine forces fighting for independence, as was the USS *Ore*gon. That battleship was famous for its epic voyage from California to Florida at the start of the war. Its hull survived until the Second World War as an ammunition barge and in 1944 was fired at by Japanese forces at Guam.

This slim book deals with a definable and limited subject in a commendable fashion and is one of a series describing mostly USN ships of various classes and periods. It contains a lot of information and does not take up much room on your bookcase. Recommended.

C. Douglas Maginley Mahone Bay, Nova Scotia

David M. Hird. *The Grey Wolves of Eriboll*. Dunbeath, UK: Whittles Publishing, www.whittlespublishing.com, 2018. Revised edition. xvii+270 pp., illustrations, maps, appendices, bibliography. UK £18.99, US \$23.95, paper; ISBN 978-1-84995-165-4.

Some of Mars' memories are anticlimactic in retrospect but tense and uncertain in real time. The Grey Wolves of Eriboll collects memories of the surrender of the German U-boat fleet in May 1945. Loch Eriboll is an isolated, deep water harbour in northern Scotland. Though utilized as a British anchorage between the wars, it was little used during the Second World War. Largely unknown, it was isolated, away from shipping lanes and, with no permanent naval base, provided no targets against which a rouge U-boat commander could make a final show of defiance. In August 1944 it was designated as the principal reception location for operating U-boats at the end of the war. Thirty-three boats would be processed at Eriboll. Others were captured in German and Norwegian ports while at least two surrendered at Gibraltar and two in Canadian ports. Upon identification, U-boats were escorted to Eriboll by Royal Canadian Navy Escort Group 9 and Royal Navy Escort Group 21.

In accord with the terms of surrender U-boats were ordered to: 1) surface immediately and remain surfaced; 2) report their position immediately to the nearest Allied station; 3) fly a large back or blue flag by day; 4) burn navigation lights by night; 5) jettison all ammunition, remove breach blocks from guns and render torpedoes and mines safe; 6) make all signals in plain language; 7) follow instructions to proceed to Allied ports; 8) refrain from scuttling or damaging the boat.

Even the act of surrender was fraught with danger. Aboard U-1109 officers conferred over whether the messages were legitimate or from the British Secret service. As U-992 approached the pier at Harstadt, someone ashore called "The war is over" to which a crew member asked "Who won?" Justice can triumph even in the injustice of war. Rumour aboard U-992 was that the captain had been reported by the onboard Gestapo agent and was to be tried for treason upon return to Germany. After surrender the captain asked for permission to submerge to correct a problem. The Gestapo agent was ordered forward to check that a gun was secured. While he was doing so on the top deck, the boat submerged. Not all followed their orders. Some scuttled their boats while others considered fleeing to Argentina. A few expected their captivity to be brief as the announcement of surrender would be shown to be merely a ruse to permit Germans and Allies to unite to fight the Russians, while others made clear that they were not glad the war was over-"not under these circumstances."

This book consists of accounts drawn from writings by both Allied and German sailors, contemporary

newspaper accounts, photographs and numerous maps and tables. Lists of the U-boats escorted to Loch Eriboll include the chronology of each one's keel laying, launching, commissioning, circumstances of capture and the disposition of the boat and crew along with a drawing of the boat's emblem, if any. I found the emblems and their explanations to be among the most interesting facts presented. Brief biographies of the captains of the surrendered boats, both of their wartime and postwar experiences, place the war in a human context. Narrations of life aboard a U-boat and comparison of U-boats to Royal Navy submarines acquaint the reader with how onerous U-boat service was. The distinction between smaller submersibles and larger submarines clarified their definitions in my mind. Explanations of the legend of the King of Norway's and Hitler's yacht were interesting additions to the main story.

The agreements reached at Potsdam provided that 30 U-boats would be retained and divided between the United States, the United Kingdom and the Soviet Union. Others were sunk in the open sea, often in ways that provided practice in gunnery techniques. The table of surviving boats and their locations may be helpful for war tourists.

I learned some things of interest but I recommend this tome primarily for serious students of the German U-boat service or topics focusing on the subjects it addresses. While a general reader of Second World War II history may find some matters that educate, few need to know about the histories of individual boats or their captains, however heroic or unique their sagas may be. I think it goes into too much detail for most readers.

James M. Gallen St. Louis, Missouri Kerry Jang. Large Scale Ship Models. From Kits to Scratch Building. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2019. 110 pp., illustrations, index of plans. UK £25.00, cloth; ISBN 978-5267-3096-1. (E-book available.)

The title of this book was an instant magnet, beckoning with the immediate question of what (and why) is 'Large Scale'. Large, after all, is relative, and any model is by definition smaller than the prototype. So, to what end 'Large'; and where lies the demarcation between large and something lesser? The answer lies in that natural fascination with ships as dynamic objects, casting a curling bow-wave and that distinctive Kelvin wave train that is the signature of all objects, from swans to ships, moving on the water surface. Early-on Jang reveals his interest in producing a working, floating, and self-propelled model as an expression of this interest, and this then is the primary driver of 'large'. But he admits another impulse also, the desire to model ship features and fittings with sufficient detail that the overall impression is that of a real ship rather than a general facsimile.

The other theme that runs through the book is the author's philosophy of modelling. He describes his evolution from a kit modeller to a scratch builder and describes the growing sense of satisfaction and freedom with the latter approach, allowing for improvisation and an "it's-the-journey-not-the-destination" state of modelling 'zen'. Jang describes the revelation of this other dimension of modelling, the joy and captivation of time spent inventing or discovering ways of fabricating items, or modifying them to look more realistic, rather than just a head-long rush in the assembly of pre-made parts.

This is a slim volume and so, can

hardly be a comprehensive manual of modelling technique. Rather it is an exemplar of what is possible, and a quick Cook's tour of some of the key aspects. For those interested in starting with large scale models or transitioning from an all-kitted model to a bare-hull starting point, the chapter on sources of supply is particularly useful. This outlines the variety of kits, semi-kits, hulls, equipment, and fittings available, and the typical scales involved. The scales generally range (according to the size of prototype) from 1:96 through 1:72 to 1:48 (this latter, the traditional scale of Admiralty drawings, and a favourite with builders of working submarine models). The largest model hull available seems to be that of HMS Hermes at 1:72 (which would make for a model some 10.3 ft in length overall! (21) Of interest to Canadian readers, Jang also notes the availability of hulls of HMCS Halifax FFH330 class (at both 1:96 and 1:72 scales) and HMCS Iroquois DDH280 class (at 1:72 scale).

The author goes beyond the limits of fully-kitted models in discussing the custom casting of items, the production of repetitive parts, and various tricks to impart realism, such as use of resin rivet decals, or the use of putty to model tarps. In tune with the discovery of self-sufficiency in modelling noted above, the author observes that the ability to depart from dependence on stock parts can be very rewarding. This particularly resonates when he notes issues of accuracy regarding the CNC-cut superstructure sets: "On the set I had, the CNC cutting was incorrect and the superstructure was too short when compared to the plans. In frustration the superstructure set was stomped on and a new one built from styrene in half the time with half the effort." (66)

The discussion of tools is cursory but adequate, while there is good coverage of the various adhesives and putties. The author does a particularly good job discussing the objectives, techniques and approach to painting in order to achieve a realistic, worn look. Given the driving interest in a 'working' model, there are separate chapters devoted to the installation and alignment of 'running gear' (shafts, propellers, struts, and rudders) and to the installation and commissioning of radio control. Again, there are other books that cover this latter in more detail, but the coverage here is appropriate and adequate in the balance of this slim volume.

There is a brief mention and list of resources, publications, and references, but I found the book lacking in its discussion of the sources and availability of plans. There were two passing mentions of the plans of Norman Ough (35, 106) in connection with the HMS *Daring* (H16) model, but the assumption seems to be that drawings will be acquired with the hull or model kit. This lack of discussion is all the more curious in light of a number of comments about elements of kits not conforming to drawings.

A key feature of this book is the collection of full colour photographs, 212 in all, illustrating the text and including a final 13-page gallery of the author's own completed models: HMS *Charybdis*, a modified *Leander*-Class frigate (1:72 = 62 in length overall (LOA)); HMS *Tyne*, a River-Class OPV (1:96 = 32.5 in. LOA); HMS *Daring*, a Type-45 destroyer (1:72 = 83.5 in. LOA); and HMS *Daring (H16)*, a 'D'-Class destroyer (1:96 = 40.2 in. LOA). These show the impressive end result of some of the techniques covered in the preceding chapters.

The book also records another of the author's singular accomplishments; that is, convincing his significant other to accept a seven-foot long, cased, Type45 model on display in their home! The fact that the author is a professor of psychiatry at UBC may suggest that he has some special skills of persuasion that were brought to bear, though he does mention sweet talking and gifts as part of the negotiation strategy.

Overall, this is a worthwhile volume that rekindles a latent interest and tempts one to reopen the dusty box of modelling tools. For those who might be interested in reading a parallel take but from a different historical era. I can also recommend William Mowll's Building a Working Model Warship (Chatham Publishing, 1997, 200 pp.) which documents the building of a working model of HMS Warrior (1:48 = LOA > 8 ft) complete with sails, a working steam plant, and authentic hawser, cable and shroud-laid rope. This book is complementary to Jang's work in providing many more details of technique, including the custom moulding of the hull.

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Nicholas Jellicoe. *The Last Days of the High Seas Fleet: From Mutiny to Scapa Flow.* Barnsley, S. Yorks: Seaforth Publishing, www.pen-and-sword.co.uk, 2019. 351 pp., illustrations, tables, photographs, bibliography, index. UK £25.00; US \$39.95, hardcover; ISBN 978-1-5267-5458-5.

Historian Nicholas Jellicoe, author of *Jutland: The Unfinished Battle*, has now completed his story of the ignominious end of the German Imperial Navy. *The Last Days of the High Seas Fleet* explains how the annihilation of the German navy did not come with the blazing guns that fired during the Battle of Jutland in 1916 off the coast of Denmark, but with its suicidal scuttling

in the cold, dark waters of Scapa Flow off the coast of Scotland in 1919. This historic event brought to a close the era of the "New Navalism" and the Anglo-German Naval Race, which had begun during the years leading up to 1914.

The naval conflict in the First World War did not end in a twentieth century "Trafalgar," the decisive victory for which the British had hoped. Instead, the German Navy remained intact, but having lost the war, was forced to surrender its ships. The British Royal Navy, though badly bloodied at Jutland, maintained its global naval dominance, and the Grand Fleet remained unchallenged.

Just days before the Armistice was signed in France in November 1918, ending fighting on the Western Front and the First World War, crews in the German Imperial Navy mutinied. Jellicoe provides a detailed account of the Kiel mutiny, which had lasting consequences for Germany and Europe, including the end of the German Empire and the establishment of the Weimar Republic. Shipboard living conditions had become intolerable as socialist and communist factions grew. German sailors were aware of the 1917 revolution in Russia and the collapse of the imperial system. Word of a possible last suicidal sailing against the British Grand Fleet triggered the mutiny. Shootings broke out as sailors turned against their officers and formed revolutionary ship-"This board governing committees. Navy!" Jellicoe quotes a German diplomat exclaiming, "It was spawned by world power arrogance, ruined our foreign policy for twenty years, failed to keep its promises during the war, and has now kindled revolution."

As the victorious Allies met at the Palace of Versailles in June 1919 to conclude a peace treaty with Germany, the German Navy was ordered to internment, first to Rosyth in Scotland and then to Scapa Flow, farther north in the Orkney Islands. Jellicoe paints a vivid picture of the German naval internment and surrender at Rosyth, where the British spared no effort to inflict humiliation on the defeated German Navy. Admiral David Beatty staged the surrender ceremony with a large portrait of Admiral Horatio Nelson staring down on the German naval officers in his cabin aboard the flagship, HMS *Queen Elizabeth*.

Once the German ships moved to Scapa Flow, their lightly-manned crews fell under the watchful eye of the British Royal Navy, but the ships legally remained German property. Winston Churchill, as First Lord of the Admiralty before 1914, had been concerned that Scapa Flow be defended adequately. "Nothing should stand in the way of the equipment of this anchorage with every possible means of security," he said.

The internment at Scapa Flow was difficult for the captives, according to Jellicoe, as the British had little concern for German comfort. They supplied water and coal but then invoiced Germany for them. Poor-quality food for the ships' crews was transported from an impoverished Germany, and the interned crews fortified their diets by capturing and cooking the occasional seagull. Not surprisingly, disease broke out—including scurvy—onboard the rat-infested ships. Medical assistance was very limited, and no dentists were made available to the Germans.

For the victorious Allies, the more than 70 German naval vessels in Scapa Flow presented a massive disposal issue. Jellicoe lays out the argument each naval power made regarding its claim to these navigable spoils of war. France demanded the lion's share, an unpalatable position to the British, who were anxious to maintain their naval supremacy and numerical superiority, especially over the French and Americans. Japan's rising navalist ambitions were also of concern.

Another option for settling the Allies' dispute over the German ships was to dispose of them literally—by sinking them. Churchill opposed this option. "What spectacle could be more foolish than for Britain and America to begin by sinking all of those fine German ships? And then starting to waste material and money on building new ones? It is fit for a madhouse," Churchill said.

Knowing that the Americans were determined to reach parity with the Royal Navy, Churchill wrote Prime Minister Lloyd George suggesting he agree to the Americans' request. Churchill reasoned that if the Americans were denied, they would build new superior ships, which the British would then have to match. Instead, Lloyd George decided to support Britain's alliance with Japan over its relationship with the United States, frustrating Churchill. "There could no more fatal policy than that of basing our naval policy on a possible combination with Japan against the U.S.," he observed.

Ultimately, tension over divvying up the German ships vaporized spectacularly. As peace treaty negotiations were drawing to a close, Germany became concerned about the fate of their interned ships. The Germans knew that surrendering their ships to the Allies would not only be a national disgrace, but it could bolster the British fleet and perhaps one day, be used against them. Germany had always considered scuttling their ships to prevent that fate and had made careful plans for the possibility. When the British squadron left Scapa Flow for brief naval exercises, the Germans seized the opportunity.

What has been called "the greatest act of naval self-immolation," began

on June 21, 1919. Jellicoe describes the scuttling in great detail for every major ship in the fleet. After the command to scuttle the ships had been signaled, German crews began flooding their ships. About two hours later, the ships—each with the German Imperial flag raised on its mast-started to sink. Early witnesses included a large group of schoolchildren, who had come to see the German fleet at anchor and could not believe their eyes. Their descriptions are among the most interesting part of the book. Jellicoe notes that several of the children later made audiotapes of what they had seen that day.

Mayhem broke out as the British ships returned from exercises. They were able to save very few of the ships—52 of the original 74 had been sunk—and a few German sailors were shot and killed in the disorder.

Scapa Flow is now a quiet, deserted place, with only century-old memories of vanished British and German sea power rivalry. Nicholas Jellicoe's The Last Days of the High Seas Fleet brings back to life the events that took place there. His book should stand as the definitive study of this event. Backed by impressive research, the author provides readers with vast amounts of information, if not always written in the most engaging style. A minor complaint is that the smooth flow of the book is interrupted by German phrases, which, though translated, are distracting. His selection of the photoplates is excellent, and the book includes an upto-date bibliography. Jellicoe's book makes a unique contribution to the historic record of what was the final act of Imperial German sea power.

W. Mark Hamilton Alexandria, Virginia Mark Jessop. *The Royal Navy 1793-1800: Birth of a Superpower*. Barnsley, S. Yorks: Pen and Sword History, www. pen-and-sword.co.uk, 2018. x+190pp, notes, bibliography, index. UK £19.99, US \$34.95, cloth; ISBN 978-1-52672-033-7.

It is difficult to categorize Mark Jessop's book. He has taken as his subject the first eight years of the French Revolutionary and Napoleonic Wars that apparently witnessed the transformation of Great Britain from an ill-equipped and ill-prepared nation into a maritime global superpower. Jessop did serve as a communicator in the Royal Navy and, according to the bibliographical note on the dust jacket, taught 'philosophy, theology and enterprise.' His aim with this book is to demonstrate the transformation of the 'old Kingdom of Great Britain' into the 'United Kingdom of Great Britain and Ireland' in 1800 occasioned by the crucible of war and the successful resistance of the threat from France.

His technique involves introducing each chapter with a fictional sketch designed to engender mood and a flavour of the times as experienced by various characters, some invented, some historical, who participated in the actions described. Footnotes are largely nineteenth century, either contemporaneous sources, or published accounts. These are intended to emphasize the verisimilitude of the fictional element as well as provide definitions of nautical terms or asides to present detail not incorporated in the story. The methodology of these notes is highly idiosyncratic and does not reliably follow standard academic practice. The bibliography on which the notes rely is restricted to material published before 1900. There is not a single reference to recent scholarship at all.

The book is divided into eight

chapters, all with titles redolent of nineteenth-century jingoism. Each fictional introduction segues into a discussion of some aspect of naval warfare. One typical chapter, "Heart of Oak are our Ships", includes a fictionalised account of the 1793 action of HMS Nymphe and the *Cleopatre*—one of Captain Edward Pellew's legendary fights-and then shifts into a narrative on warships. He then describes the basic system of ship 'rates', as well as some details into dockyard work, expenses, manning and anecdotes. This structure is repeated throughout the book. It is a most extraordinary compilation.

This book is not an academic enterprise. It may be of interest to a lav audience that wishes to get a taste of what naval life may have been like at the 'ordinary person' level. There is nothing wrong in such an endeavour, but the structure and organization lead to a hit-or-miss approach to the subject and a loss of coherence. As well, the premise of the book that implies that Great Britain, from a shaky start, had evolved into a 'superpower' in only eight years failed to convince this reader. The term 'superpower' is anachronistic, of course, as it was first applied to the post-Second World War reality of the US-USSR Cold War confrontation in which there was no other peer. Great Britain certainly had a powerful navy in the period covered by Jessop's book, but peers abounded and global dominance was anything but assured in 1800 (any more than it was in 1900).

These caveats noted, the book is replete with interesting snippets of naval lore culled from period sources. It would be a useful reference for any Hornblower (C.S. Forrester) or Aubrey-Maturin (Patrick O'Brian) enthusiasts as the oblique references in those novels can be easily looked up here. A selection of appropriate illustrations accompanies the text, which also includes some maps that lay out the geography of relevance to the account. The index is comprehensive, making it relatively easy to explore specific issues of interest. The bibliography is a useful summation of contemporary and near-contemporary accounts and provides a starting point for research, albeit neglecting anything after 1900.

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Philip Kaplan. *Hitler's D-Day Defences.* Barnsley, S. Yorks: Pen & Sword Books Ltd., www.pen-and-sword. co.uk, 2017. 176 pp., illustrations, bibliography, index. UK £25.00, US \$39.95, cloth; ISBN 978-1-52670-540-2

One immortal scene in the 1962 movie *The Longest Day* shows a German officer on the morning of 6 June 1944, peering through a view slit in a fortification on the Normandy coast and seeing the Allied invasion fleet gradually appear. When asked where the invasion fleet was headed, his reaction was, "Straight for me!" Kaplan's *Hitler's D-Day Defences* shows many surviving fortifications and provides a narrative of the Allied landing that, together with the Soviet drive through Eastern Europe, resulted in the surrender of Nazi Germany less than a year later.

After the Nazi victory over France and the Low Countries in May-June 1940, German forces occupied the French Atlantic coast. Over time, the German Army began to fortify the coast against the inevitable British-American invasion of northern Europe. Although American military commanders pushed for a cross-Channel invasion as early as 1942, the British High Command knew that the American forces were not yet ready to face the German Army in France head-on. Thus, American-British military efforts were directed to invasions of North Africa, Sicily, and Italy. Nevertheless, Hitler directed that work on the French coast fortifications continue—which became known as "The Atlantic Wall." In early 1944, German Field Marshal Erwin Rommel took command of German forces in "The Atlantic Wall" and sped up construction of the fortifications. The Allies, when they finally invaded France, faced well-constructed bunkers, artillery batteries, and machine gun nests.

The invasion came on the morning of D-Day, 6 June 1944; the American Army attacked two beaches, codenamed Omaha and Utah; the British Army attacked two beaches. Sword and Gold, and the Canadian Army attacked Juno Beach. Omaha Beach saw the heaviest fighting with Juno Beach being a close second. The British had their struggles on Sword and Gold beaches, while the other American beach, Utah, saw the least amount of combat (though it was still a challenge.) As history has shown, D-Day was successful and is remembered as the most successful amphibious assault in history.

Kaplan's book is a mixed effort; the photographs of the surviving German fortifications, the beaches today, contemporary photographs, especially of the commanders involved on both sides, and other relevant graphics are valuable. It is incredible just how strongly built the Atlantic Wall was and how heavily armed the Germans were. Many of the surviving bunkers still have their artillery (deactivated) inside and visitors will appreciate the engineering and construction effort involved. Photographs illustrate the strength of the defences and what fortitude it took for the Allied troops to overcome them.

The author accompanies his photographic record with a narrative for the general reader, but in truth, the narrative is not of the same quality as the accompanying graphics. Kaplan writes well and his work is easy to read, but it does not give an overall account of D-Day. The narrative encompasses ten chapters covering the background to D-Day, the construction of The Atlantic Wall, the air campaign prior to and accompanying D-Day, and accounts of the battles at Sword Beach, a U.S. Army Ranger attack on Pointe Du Hoc, and the near-failure at Omaha Beach. Little analysis appears regarding Gold and Utah beaches, while the Canadian beach, Juno, is scarcely mentioned. This is a critical omission, for the Canadian Army on D-Day faced the second toughest set of German fortifications and advanced farther than the American or British forces did by the end of the first day. Indeed, the Canadians came closer to meeting their objectives than either the American or British forces. The reader seeking a fuller account of D-Day is well-advised to refer to some of the many books published regarding D-Day, including those listed in the bibliography.

It is the photographs that make this book worth reading; on page 74, one poignant photograph brings home both the struggle on June 6 and the waste of war. It is of a German helmet found on Omaha Beach. Although time and the elements have taken their toll on the helmet's finish, the bullet hole in the front of the helmet—a most-likely fatal shot to the wearer's forehead—does not fail to sadden. After all, a human being once wore that helmet.

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N. Jack "Dusty" Kleiss with Timothy and Laura Orr. *Never Call Me A Hero: A Legendary American Dive-Bomber*  Pilot Remembers The Battle of Midway. New York, NY: HarperCollins Publishers, www.harpercollins.com, 2017. 312 pp, illustrations, maps, glossary, index. US \$49.00, cloth; ISBN 978-0-06-269205-4. (E-book and audio book available.)

Some books tell of the crucial importance of the Battle of Midway with interpretations of how victory was achieved. *Never Call Me A Hero* is the memoir of N. Jack "Dusty" Kleiss, one of the most successful pilots of that battle. More than a battle tale, it is biography, love story and naval history twined into a very readable and captivating work.

During his boyhood in Coffeyville, Kansas, Jack developed a love for flying. After joining the Kansas National Guard he chose a nomination to the United States Naval Academy over admission to the University of Kansas. The studies, football, summer cruises and commencement address by President Franklin Roosevelt were enjoyable and preparatory to his naval career.

Following commissioning as an ensign in 1938, he was assigned a turret officer on the cruiser USS *Vincennes* that was based in Long Beach, California. While there, he met Eunice Muchon. Although his Protestantism and her Catholicism would delay their marriage, determined courtship while on leave and by correspondence would pay off when, under the nickname of Jean that he bestowed on her, they married for life.

Jack's dream of becoming an aviator advanced in August 1940 when he reported to Ground School at Pensacola Naval Air Station. During training he made friends, earned his wings and, at its conclusion, was assigned to Scouting Squadron Six at San Diego. Upon arrival on 6 May 1941 he commenced his aviation career and was reunited with Jean.

Jack's rendezvous with destiny began on 28 November 1941 when Enterprise's Task Group, of which he was a part, sailed from Pearl Harbor for Wake Island to deliver two squadrons of Marines. It was placed on "Battle Condition Three" with orders to bomb any Japanese submarines it encountered. At 8:10 a.m. a strange transmission came over the radio: "Please don't This is Six-Backer-Three, an shoot! American plane!" Follow-up messages established that Enterprise aircraft had engaged a Japanese airstrike bound for Pearl Harbor. When the state of war was confirmed, Jack lead a patrol to protect Enterprise and its escorts. His return to Pearl Harbor was surreal as he saw the USS Oklahoma capsized, the Arizona resting on the bottom, a tomb for 1,177 sailors along with the wreckage of battleships and smaller vessels. Resupplied with fuel and supplies Enterprise set out to strengthen American and weaken Japanese installations near Hawaii. After dropping off Marines at Samoa, they attacked Japanese-held islands. In February 1942 Enterprise struck back with a series of raids against the Marshall Islands.

Kleiss tells us what it was like to fly dive bombers.

"My plane screamed out of the atmosphere like a banshee, descending from 14,000 feet to 2,000 feet in about thirty seconds. As the cool air roared around open cockpit, I peered through the Mark-3 bomb scope and surveyed the runway. Fires already speckled the field. I sighted a parked plane. With my other eye I glanced at my altimeter, watching it spin wildly and counting down the seconds to release altitude. All the while, Japanese antiaircraft gunners plied their work of death, filling the sky with puffs of shrapnel. At 2,000 feet I gripped the bomb release on the left side of the cockpit and wrenched the lever, releasing my two 100 pound wing bombs. When I was certain these bombs had dropped clear I executed a snap pullout, and for a brief instant, the pressure of 8 or 9 g's squeezed my body. With long, heavy breaths, I kept the world in front of me as it tunneled because of all the blood rushing out of my head and rolled out of my dive with another ninety-degree turn. Below and behind me the parked enemy plane disappeared in a ball of flame. (137-138)

Wake and Marcus islands in February-March 1942 were mere warms ups for the big show at Midway in June with Kleiss in the heart of it on 4 June. Deducing the Japanese carriers' location from the trajectory of a destroyer catching up with the formation, Jack's Squadron Six focused on the carrier Kaga and reduced it to a burning hulk as they left on a dogleg course so as to not betray their home carriers' locations. Refueled and rearmed, their afternoon target was the carrier Hiryu whose demise was swift and violent. Kleiss explains how he watched the targeting of the preceding dive bombers to finesse his approach to deliver his bombs on target. On 6 June they returned to finish off the destroyers and cruisers that had guarded the carriers.

In the wake of Midway, Jack was decorated, returned to the States as a flight instructor and married Jean. He would remain in the Navy until retirement in in 1962. At the time of writing, he was the oldest living dive bomber and possibly, the oldest pilot involved in the Battle of Midway. His one hundredth birthday featured a call from another former carrier pilot, George H. W. Bush. Kleiss died in 2016.

Though the story belongs to Kleiss, co-authors Timothy and Laura Orr must be credited with coaxing Jack's story out of him and helping write it in a fashion that conveys excitement, the tugs on lovers' heartstrings and presents the details in a very enjoyable book. While telling the tale of a hero who never wanted to be called one, it never spirals into the author's narrow world to the exclusion of the war in which he fought.

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John Lambert and Al Ross. *Allied Coastal Forces of World War II. Volume II: Vosper MTBs and US Elcos.* Barnsley: Seaforth Publishing, www. pen-and-sword.co.uk, 2019. (Originally published 1993.) 256 pp., illustrations, line drawings, lists, bibliography. UK £40.00, cloth; ISBN 978-1-5267-4755-6. (E-book available.)

This large-format book is the sequel to another covered by a previous book review in this journal dealing with British Fairmile wooden boats and American submarine chasers, now being republished by a military publisher with a maritime imprint. The focus of this volume is on British motor torpedo boats of Vosper design and American constructed Elco fast patrol boats, used extensively by Allied coastal forces during the Second World War. The British John Lambert and American Al Ross previously collaborated on the volumes, advertised as classics, by drawing on a vast range of research, interviews with veterans, drawings and blueprints from builders, as well as examining examples of such craft restored and preserved in museums. John Lambert, who has since died, was a naval draughtsman by trade and his reworked and original detailed drawings are very well-regarded.

The book adopts a reference style with lots of captioned photographs, profiles, drawings, tables, and lists. Informative text introduces each section without citations or footnotes. The book is essentially divided into three parts. Lambert provides an administrative, engineering, and building history of Vosper Limited, as a company called upon to produce numbers of fast boats of its own design before and during the war. He documents the design and technical aspects of several build programs and iterations. His drawings, either two- or three-dimensional, are superb and detailed, many with explanatory numbered arrangements. The torpedo-carrying Vosper of various lengths and armament evolved to meet operational requirements in European and Asian waters. The next sections done by Ross have simpler drawings and longer lists that focus on the boats furnished by Elco. The US Navy's call for competitive designs along with early British influences of licensed production in the United States and Canada provided a basis for experimentation and variety. Much less background is provided on Elco as a business and boat-building entity and more focus given to the boats (PT) themselves and their arrangements. Trials nicknamed the "Plywood Derbies" decided on the best characteristics and highlighted the need for longer and sturdier designs. PT boats of 77 and 80 feet in length became ubiquitous in the Pacific war, carried from the United States on the decks of tankers. General Douglas MacArthur and his family escaped from the Japanese invasion of the Philippines in PT boats. Both PT designs incorporated four torpedo tubes and short-range anti-aircraft armament. In order to be effective. motor torpedo boats had to engage the enemy closely to get near enough to attack larger warships and therefore, were vulnerable to gunfire and aircraft. Their speed and light wooden construction were considered advantages. As

the British and Americans found out, the operational life of motor torpedo boats was relatively short because they wore out quickly, while living arrangements were minimal, necessitating bases and support ships. The last part of the book provides sections on common camouflage schemes, characteristics of supercharged Packard marine engines, defensive guns and mounts, offensive torpedo and rocket systems, and bridge arrangements. Introduction and development of the Oerlikon 20 mm anti-aircraft gun in the Royal Navy, used extensively among coastal forces, recounts a story of international intrigue from the Swiss manufacturer and eventual production through the advocacy of Louis Mountbatten in Great Britain for war needs. The Oerlikon, which featured a novel design and ironically was also used by the Germans, was relatively expensive compared to similar gun types and lacked the necessary range as the war went on. It was replaced by the heavier striking Bofors 40 mm, another foreign-inspired design. Lambert's profile and dimensional drawings of the gun in manual- and powered-mount configurations are detailed and truly first-class. Sections describing the US 37 mm and 40 mm guns are by contrast smaller with fewer drawings. The book ends with transfer of Vosper motor torpedo boats to the Free French and, due to interest from readers of the first volume, some details on surviving Vosper and Elco craft up to the mid-1990s.

The book provides largely technical, construction, and engineering overviews of these particular types of motor torpedo boats, with a little comparison between the two. Those seeking operational histories and how the craft were actually tactically employed will have to go elsewhere, beyond the small details provided in the lists and tables. British coastal forces played a cat-and-mouse game with the German schnellboote or E-boat in the English Channel, North Sea, and Mediterranean. In many respects, the diesel engine and longer E-boats were superior to the gasoline-powered Vosper in both reliability and range. Much depended on the aggressiveness and proficiency of the officers and crews. The smaller motor torpedo boats attracted a different breed of personnel distinct from those in the fleet and larger warships, when a destroyer, sloop, or minesweeper were considered big ships by comparison. The naval reserve and temporary hostilities-only sailors of amphibious landing forces probably had more in common with them. Further scholarship is needed on understanding the war experiences of these men within the navies, much harder now that most veterans from that era have passed. They very much fought their own war against a similar enemy in the so-called narrow seas right up to the surrender in 1945. The Japanese captured a number of motor torpedo boats in 1941, mostly relegated to patrol and resupply duties, since the focus as the war progressed was on suicide boats and submarines.

The format and pagination replicate the original volume, with the same forwards and acknowledgements by Lambert and Ross. Contacting the now deceased Lambert, as suggested, however, is out of the question. The bibliography has not been updated to reflect additional research and scholarship since the original publication, and no index is provided. The republished volume does have an eight-page colour insert intended for ship modellers, with paint schemes for Vosper and Elco boats showing side and top profiles. This interest in camouflage has become somewhat of a cottage industry, with many on-line sources and publications devoted to the topic. The Royal Navy and US Navy devoted considerable attention to different colours and patterns during the war, though whether the schemes actually worked under real world conditions was seldom proven. Mountbatten pink was wildly popular amongst some ship crews in the Royal Navy, whereas standard white or grey met the needs of most weather and sea states to cut down visibility. Volume 2 of Allied Coastal Forces in World War II will appeal to readers interested in motor torpedo boats used by the British and Americans in coastal warfare at sea and those building smaller scale versions of these interesting craft. Many of these miniatures are ideal for playing naval war games.

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Roy R. Manstan. *The Listeners: U-Boat Hunters During the Great War*. Middletown, CT: Wesleyan University Press, www.wesleyan.edu, 2018. xii+353 pp., illustrations, notes, bibliography, index. US \$34.95, cloth; ISBN 978-8195-7835-8. (E-book available.)

At the start of the First World War, submarines were a novel vessel. The British considered them a defensive weapon to protect their harbours and coastline. The Germans perceived submarines differently. As an island nation, Britain envisioned these stealthy warships as aggressors that could disrupt sea routes and shipping, denying vital supplies like food, and thus raising the threat of starvation. A serious cat-andmouse game resulted. Scientists were recruited to invent a way to locate the illusive undersea nemeses before they could sink a critical number of surface ships and bring the British Empire to its knees.

The secret to finding submarines

was by locating their sound trail as they traveled in the ocean's depths. Once they had been detected and fixed, allied warships could use depth charges or other explosive devices to dispatch the invaders. This required research and an understanding of fluid dynamics or hydrology.

Operating submarines usually produce sounds by two methods: first, Unterseeboote or U-boats have complex machinery that emits all sorts of sounds; second, bubbles, a by-product of propeller rotation in water, make a sound. These bubbles. called cavitation, are the result of pockets of vapour under pressure formed within the liquid medium. When the molecules change from a liquid to a gaseous state, it can be subtly noisy. Thus, mechanical propulsion made the U-boats potentially vulnerable. Based on this knowledge, the Americans and British set out to build audio detectors that could distinguish sounds coming from a submarine as opposed to other surface vessels or marine mammals, such as whales. Once they succeeded, they next had to find a way to triangulate the submarine's location in order to destroy the subsea predators.

The solution was to invent underwater listening devices called hydrophones. As they evolved, they acquired exotic names such as 'Nash fish', 'porpoises', and 'eels'. The sound traveling from a single source can produce a stereo effect if receivers are separated. This property could be used to determine the sub's location-a vital but challenging task. Among the more imaginative methods was utilizing a trombone effect, putting the separate hydrophones on long sliding trombone-like tubes to gain distance between the hydrophone mikes. The minute lag in sound travel time enabled the receivers to get a fix on their prey. This principle was later adapted to more advanced apparatuses. Two other devices used with even greater accuracy were trailing wires and electromagnetic coils that took advantage of the piezo-electric effect by detecting the iron hulls of U-boats that became magnetized as they moved through salt water. These techniques were very effective in channels purposely narrowed by the strategic placement of barrage nets and deep-water minefields. Manstan includes details about their function, evolution and the scientists involved.

Several types of surface vessels were deployed to combat the U-boat threat. The first were the detectors, the wooden-hulled 110-foot subchasers equipped with an assortment of listening devices. Next were the destroyers, with their "Y-guns" or depth-charge launchers. Other anti-submarine vessels were Q-ships named for Queenstown, Ireland, where they were invented. These were clever, heavily-armed decoy vessels that looking like merchantmen but with concealed weaponry. Like "defenseless sitting ducks", Q-ships appeared to be easy targets for the U-boat's deck gun. They would lure the U- boat to the surface to attempt to sink them with low-cost cannon fire. When the U-boat tried to engage the decoy, the Q-ship's panels would drop, revealing several deck guns. The crew would immediately raise the White Ensign (Royal Navy flag) to identify their nationality and immediately open fire. Unfortunately, Q-ships were not very successful in sinking their quarry. Other airborne detectors, such as seaplanes, dirigibles, large balloons, and kites worked hand-in-hand with surface ships to help lessen the effectiveness of the U-boats. They sent messages by wireless or undetectable infrared signal lights using Morse Code to accompanying vessels.

By the beginning of the war, Ger-

many had built 28 U-boats, which, according to the author, mushroomed into 346 vessels as the war progressed. German U-boats were divided into three types. The U prefix generally indicated that they were ocean-going attack torpedo boats. The UB designation was used for coastal attack U-boats, while the UC label was reserved for coastal minelaying submarines. These vessels were a major arms investment, so the Germans cleverly countered the detectors when they were aware that they were being stalked. They descended into the ocean's depths, stopped their movement and remained absolutely silent as long as their oxygen and battery power permitted. If depth- charged, they would release oil and debris to give the impression they had been damaged or sunk. A second ploy to confound listeners onboard subchasers was running two electric motors onboard the U-boat at different speeds. Their propeller shafts revolved in a way to neutralize vibration and its tell-tale bubbles, largely rendering the vessel inaudible – a submerged ghost.

Manstan describes many experiments that led to breakthrough technology. In doing so, he skillfully blends the development of combat operations with clever innovations, while interconnecting them with the political and strategic background at play as Americans and British scientists raced to counteract the threat of the elusive U-boats. The Listeners is illustrated with an abundance of photographs and informative drawings that make their quest quite vivid. The author closes the book with several stories about successes and failures in First World War U-boat hunting and then brings the quest for submarine detection up-to-date. This is a detailed study of a topic that is often only a paragraph or two in a maritime history of the so-called Great War. Roy Manstan was employed at New London's Naval Underwater Experimental Station and has used his considerable scholarship to admirably succeeding getting the U-boat hunters' story told.

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Evan Mawdsley. *The War for the Seas:* A Maritime History of World War II. New Haven, CT: Yale University Press, sales.press@yale.edu, 2019. 557pp., illustrations, maps, tables, bibliography, index. US \$32.50, cloth; ISBN 978-0-300-19019-9.

We are approaching 75 years since Samuel Eliot Morison published the first of his 15-volume *History of United States Naval Operations in World War II*, unleashing a flood of studies, memoirs, analyses and narratives of the war at sea between 1939 and 1945. Now, two notable historians, Craig Symonds in the United States (*World War II at Sea: a Global History* (Oxford, 2018) and Evan Mawdsley in Britain (*The War for the Seas: A Maritime History of World War II*, Yale, 2019) have brought forth massive single-volume histories.

Symonds' effort is beyond the scope of this review, except to note that both Oxford and Yale claim that their product is unprecedented. Mawdsley, who has written widely on the Soviet Revolution and State in war and peace, together with an equally massive history of the entire Second World War, has penned a sweeping and competent academic study that obviously took time and care to complete. It has significant strengths. Mawdsley's steady concentration on the limits of shipping in the making of Allied strategy, while not unique, is nonetheless an important reminder of the constraints on Allied movements until the final months of the

Pacific War. His ability to relate distant and seemingly unrelated events is striking and thought-provoking. Though all tales about the Second World War at sea have been told again and again, his accounts of the *Bismarck* episode, the Norwegian campaign and the Allied assault against Dakar are consistently interesting and compelling. His discussion of the Mediterranean campaign between 1940 and 1942 is outstanding, as is the story of the catastrophic fate of the Tallinn evacuation convoy of August 1941 in which upwards of 25,000 perished miserably.

Yet, as the author hurries on his discussion through innumerable battles and skirmishes at sea, their cumulative drama and horror is often buried beneath a mass of statistics, ships' specifications, and administrative details (particularly true of his account of the Imperial Japanese Navy). There is little evocation of the ghastly fate of sailors on all sides who perished in the freezing waters of the North Atlantic, or in hangar decks and engine rooms of exploding aircraft carriers, or the poor devils who died with their cruisers and destroyers in the mournful night battles off Guadalcanal, up the Solomons "slot," and at Surigao Strait. The sheer terror of those caught on the beaches at Tarawa, Normandy, and Iwo Jima is never mentioned. A judicious quote or two from time and place would have been of immense value, for as the war recedes and the last of those who fought or observed it leave us, it is all the more imperative to understand the conflict in all its dreadful dimensions.

Unfortunately, there are other flaws, among which is sloppy editing; for example, an irritating tendency to substitute "were" for "where" and "repeated" for "repeatedly" throughout the text (see for example, top p. 336). These editorial felonies are compounded by simple carelessness ("The two battles fought in mid-November and part of the naval Battle of Guadalcanal in mid-November...") (233-34) and inattention to fact ("In the final months of the [sic!] 1944 bases were captured in the western Pacific and northern Australia. . . (360-61) Italics mine]) At one point, the author writes of the "New Brooklyn class light cruisers" (248) when he clearly means Cleveland class, since the Brooklyns were not new in 1943 but the Clevelands were. He misstates the commissioning date of the submarine Trigger as January 1941 rather than a year later. (351) This is important because the first of the 226 boat Gato class (of which *Trigger* was a part) that formed the backbone of America's "fleet" submarines during the Second World War were not commissioned until just before Pearl Harbor.

There are more serious problems. Mawdsley's implication Professor (273) that Britain invented modern amphibious warfare ("Combined Operations") out of the pinprick raids against the enemy-held Western European coast between 1940 and 1942 simply ignores Japan's impressive activities on the China coast and later, the Western Pacific islands between 1940 and early 1942. His contention (474-75) that the U.S. Navy's sea/air blockade of the Home Islands in the summer of 1945 was so thorough as to preclude enemy re-enforcements from China is not true. Over a decade ago, newly-released military intelligence documents indicated that, in fact, Tokyo continued to successfully transfer elements of Japan's battle-hardened Kwantung Army from the Asian mainland to the anticipated invasion beaches of Kyushu to such an extent as to make an Allied invasion there increasingly problematic. This consideration weighed decisively in the decision to use the atomic bombs against Hiroshima and Nagasaki. [Rose, *Power* at Sea, (Missouri, 2006), II, 414-15]. Also erroneous is the author's contention that after the Marianas campaign in the summer of 1944, the Japanese "did not even attempt to stop the Americans coming ashore." (474) The Marines struggling and dying up the steep, dark, sandy beach at Iwo Jima would have been stunned to learn of this contention.

The War for the Seas has to be read with care. But this does not mean it should not be read at all. While the author presents no startling new insights, his accounts of the evolving strategies of the four major maritime players will be of interest to academic specialists, while the general reader, after ploughing through nearly 500 densely packed pages (plus the additional footnotes) will come away with a powerful sense of a mighty event, or series of events, that continues to shape naval and political thought and practice down to the present day.

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Gabriel Paquette. *The European Seaborne Empires: From the Thirty Years' War to the Age of Revolutions*. New Haven, CT: Yale University Press, www. yalebooks.yale.edu, 2019. viii+298 pp., illustrations, maps, notes, bibliography, index. US \$35.00, cloth; ISBN 978-0-300-20515-2.

The title of this book suggests the reader will engage in the examination of the maritime explorations and naval engagements to expand and defend empires during the era of Europe's expansion into the western and eastern reaches of the globe. One anticipates reading about the struggle to build, enlarge, and defend empires, as viewed from the quarter deck. But this is not what one will find within this marvellous book. Indeed, the expected detailed maritime history is missing. What lies in its place is a masterful telling of the interface between European settlers and the indigenous people inhabiting the spaces those settlers wished to claim, the various structures of governance over the colonies, and the complex relationship between colony and founding metropolis. Five European countries (Portugal, Spain, Holland, France and England) serve as the metropolitan areas studied, that reached out across the vast oceans to the rest of the world.

As Paquette notes in the first chapter, it is not a tale of noble adventurers seeking to bring good to the 'new' worlds they 'discovered'. Nor, he argues, was it a totally shameful, crushing domination, resource-robbing, population-killing colonialization that some historians might have their readers believe, though that does seem to apply in many locations. Paquette holds that the story is much more nuanced and complicated, with great differences across the enormous territories contested for by 'indigenous inhabitant' and 'settler'.

Paquette painstakingly describes the various forms of governance, from crown government control, to individual rule based on grants, through rule by chartered company or "privileged trading company". Different forms existed side-by-side, often within different areas of the same colony, at the same time. In some cases (as after England's Glorious Revolution), crown-like absolutism persisted in some English colonies, though the metropolitan had chosen a more representative system.

As to the interface of settler and indigenous inhabitant, in some areas Europeans attempted to work with the indigenous people, at times from the necessity of sheer survival, at others in an effort to gain trust and insert their par-

ticular European culture into the lives of the Indigenous groups, or simply to facilitate peaceful coexistence. Examples include the incorporation of "preexisting institutions" into European systems. Combining approaches to justice created unique legal pluralisms (113). The Spanish, for example, formed special courts to decide conflicts between Spanish settlers and indigenous people, based more on indigenous 'legal' practice than European. In India, the English kept both Hindu and Muslim legal codes, though they put British judges in the courts and followed English trial procedure. European and traditional legal and authority systems co-existed in many colonial sites. The most basic level of melding cultures was intermarriage between settler and indigenous member, creating both points of alliance, and tension.

At other times, it was a case of military conquest, to crush resistance and use the local people for material and economic ends. The Spanish conquest of the Incas (even though it was not complete) is perhaps the single most obvious example. Captured Amerindians were forced to work the South American silver and gold mines.

The colonies provided great sources of wealth for their metropolitan centres. Portugal and Spain profited from silver and gold mines of South and Central America, the English from the sugar fields of the West Indies, the tobacco from the American colonies, and Asia's tea and cotton. Paquette quotes First Viscount Melville, Henry Dundas, Secretary of State for War in 1799 who commented on Great Britain's reliance on expanding its colonial resources, at the cost of its enemies, as " the sole basis of maritime strength" (96). Some European cities grew rich and developed significantly as a result of the colonial trade, an example being Liverpool, thanks to its involvement in the slave trade. The objective of expanding wealth motivated the five nations studied to raid and seize each other's settlements throughout the era.

The sites of settlement, along coast lines, often developed into ports and urban centres through which trade flowed. This, in turn, led to more settlement and an expansion outward into new areas of settlement and economic development. This did not occur easily in all areas, as the author noted in the cases of China and Brazil, where European incursion into the interior was severely restricted until much later in the colonizing process. To monopolize their colonial trade nations attempted to restrict, or forbid, outsiders from trading with their colonies, protecting the source of wealth for their own metropolitan's benefit.

Employing James Scott's idea of everyday resistance, Paquette also makes it clear that settlement was not simply accepted, even after military subjugation. Resistance varied from area to area, but was generally engaged in by the indigenous populations. Some resistance took the form of rebellion, as in Oaxaca in the 1660s, or riot, as across the Andes between 1750 and 1780 (180) Settlers attempting to eke out a new life also resisted their own colonial administrators and efforts by the metropolitan government to control them from afar. Perhaps the best example during the period covered by the book was the American Revolution, where English settlers (and other nationalities, including some indigenous groups) threw off the reins of the English Parliament to create their own government (though not all who supported the revolution fought for it, or left in the country after it, were free). African slaves also rebelled and resisted their masters. The most significant case being Haiti, where the enslaved eventually obtained freedom and established

a government, sending shockwaves around Europe (and its slave-holding colonies). But not everyone resisted. Some indigenous people collaborated with the Europeans to advance their own leadership, power and /or wealth, such as the Africans who supplied the slave trade with people.

The seaborne element in the story includes the simple fact that ships of exploration, settlement, mercantilism, and war were necessary to create these world-wide 'empires'. The five countries examined were the explorers and naval powers (at different times) that reached across the oceans and set people on new shores. Their navies (especially true for the English by the end of the era) allowed them to maintain, defend and expand their territories. As noted above, the details of exactly how this took place are not widely discussed within the book.

Paquette spends some time on the maritime link when discussing slavery within the topic of various labour forces sent to the colonies. The largest source of imported workers was overwhelmingly brought in by the lucrative, and brutal, slave trade. All five countries discussed were involved in the nefarious trade, supplying their own and other colonies with an enchained workforce. The slave vessels left Europe with goods to trade with the Africans, who ran the local slave trade. Alcohol, tools, utensils, tobacco and a large number of arms were shipped to Africa to foster the collection of people bound for slavery. The ships then transported the slaves from Africa to the 'New World', finally carrying raw material or manufactured goods back to Europe for trade. The details of the middle passage are briefly addressed within this text. But even within the subject of slavery, we see twists. Paquette states that in North America, the French traded goods for slaves from the Algonquins, who enslaved their enemies, trading them as a means to "cement their alliance" with the French (147).

Paquette is successful in convincing the reader that the empires were anything but a one-sided European exertion of power, or a simple conquering of indigenous people, followed by the erection of societies which completely mimicked European models of governance and culture. The history is much more complex. The maritime piece was essential for it to have unfolded at all, but the counter point is also true: the path of the maritime element was shaped by the ways in which European settlement transpired and developed within the areas labelled as European empires. Therefore, this book becomes an important addition in the study of maritime commerce and naval power during the age of empire.

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Norman Polmar, Rear Admiral Thomas A. Brooks, US Navy (Retired), and George E. Fedoroff. *Gorshkov: The Man Who Challenged the U.S. Navy.* Annapolis, MD: US Naval Institute Press, www.usni.org, 2019. xx+264 pp., illustrations, maps, endnotes, indices, bibliography. US \$39.95, cloth; ISBN 1-978-16824-7330-6.

Sergey Georgiyevich Gorshkov was without question one of the outstanding military leaders of the Cold War. As Commander-in-Chief of the Soviet Navy for almost 30 years (1956 to 1985), he oversaw its steady growth into a powerful modern force with cutting-edge technology. Gorshkov was obviously highly competent and as Admiral Gorshkov: The Man Who Challenged the U.S. Navy shows, his rise to

the top of his profession was marked by being the right man in the right place at the right time. Like Chester Nimitz of the US Navy, whose career survived after the destroyer he commanded at age 23 grounded, Gorshkov' s career survived being in charge when, at age 28, a new destroyer he was towing broke loose and was lost. He was both young and serving far from Moscow in the Soviet Far East when the purges decimated senior naval ranks in the late 1930s (one admiral formerly in charge in the Pacific was shot; his successor died in prison). After the purges ended, Gorshkov was promoted to command a cruiser brigade (squadron) in the Black Sea in 1940 and was, thus, in theatre when the Germans attacked in June 1941. Promoted to Rear Admiral at the age of 31, he was in the thick of fierce amphibious and riverine fighting during the war. He was injured when his American-built jeep ran over a land mine in 1943 and was troubled by spinal damage for the rest of his life. Gorshkov demonstrated flexibility in several tough situations and even commanded an army on the Black Sea coast for a month in 1942. He survived during dire times and made the acquaintance of future political leaders Nikita Khrushev and Leonid Brezhnev and General Andrei Grechko, who would become Minister of Defence between 1967 and 1976, and a staunch supporter.

The authors are a seasoned troika who have long studied the Soviet navy during the Cold War. Retired Rear Admiral Thomas Brooks was an intelligence specialist who has told an interviewer that Admiral Gorshkov' s 30-year tenure virtually overlapped his entire career. George Fedoroff is a Russian linguist who apparently has been analysing Russia for US Navy intelligence since 1971. Norman Polmar has a long track record as an analyst and author specialising in naval and technology issues. He published an authoritative guide to the Soviet Navy in the 80s and co-authored several books about Russian and Soviet submarines. The authors acknowledge also drawing on the expertise of a formidable "who's who" list of western intelligence experts. They note that while Sergey Gorshkov's name became well known in the West, little has been available about the admiral's life and character. Three books published in Russia since the collapse of the USSR are cited that do provide the sort of insights about SG Gorshkov that were absent in Soviet literature. The authors have drawn on these sources and lifted the curtain somewhat, but once they describe the crucible of Gorshkov's war experiences the book is largely a survey of how the Soviet Navy evolved from then on. Overall, Admiral Gorshkov's 217 pages of text is an overview of the developments that saw the Soviet Navy develop capabilities, many innovative, in response those of western navies and come to be used by the USSR to expend its reach in the developing world. It covers doctrines, surface ships and submarine building programs, and as well touching on the careers of senior officers who were Gorshkov's contemporaries. The narrative clarifies the role of the Communist Party in the Soviet state and how Gorshkov, like other military professionals, advanced up the party hierarchy. Apparently, his bureaucratic skills and ability to cultivate senior figures enabled him to advance professionally and to push through programs.

There are many general summaries following descriptive sections but little analysis. For example, the Soviet Navy is described as devouring "vast quantities of resources, facilities and manpower." (174) A valid point, but comparisons of resources going to the other Soviet military forces and the sig-

nificance of developing sophisticated naval systems for Soviet technology would have been more telling. There are several references to the dramatic Okean exercise staged in 1970, the centenary of V.I. Lenin's birth. The narrative is probably correct in describing Okean as primarily intended to demonstrate the navy's efficacy to the Soviet leadership. It certainly caught the attention of western media. It is termed as "the world's largest peacetime naval operations in terms of numbers of participating ships and aircraft and of geographic spread, across several seas and oceans." (189) The authors do not speculate on whether Okean, dramatic and centrally-controlled as it was, demonstrated likely wartime scenarios or was global flag waving. Some of the well-known disasters (many with tragic losses of life) which plagued the Soviet Navy are touched on. But there are no comments on the likely fighting effectiveness of Soviet weapon systems, technology, ships, submarines, naval aircraft and command and control systems. The conclusions the authors must have made during their long years of observing Gorshkov's navy are not shared. They do assert that while the U.S. Navy encountered Soviet ships in forward areas "...there was confidence that the Soviet Navy would provide a relatively minor threat to the U.S. Navy, one that its superior aircraft carriers could easily defeat." (205) This is followed by a wry observation that ".... Admiral Gorshkov's surface ships and submarines served well to justify naval expenditures before congress." A sweeping and surprising generalization presented without any supporting material appears on the next page: "For its part, Admiral Gorshkov's navy had in particular a more fully developed strategy for nuclear war and an arsenal far better suited to fighting in that environment. It war-gamed nuclear war at sea extensively and practised it in exercises. The U.S. Navy seldom did either."

The book includes a useful summary of Russian naval developments up to 2015. It has excellent maps, topical photographs clearly presented on glossy paper, a useful bibliography, and two minimalist indices. It has been produced to publisher's usual high standards of sturdy binding and handy size. The writing style is straightforward and the text is refreshingly free of acronyms and jargon. Based on post-Soviet Russian sources as well as the formidable background knowledge of the authors, Admiral Gorshkov can be recommended as a summary of S.G. Gorshkov's career and a wide-ranging, if unanalytical, overview of the Soviet and Russian navies from the late 1920s to roughly 2015.

The authors chose not to include the human-interest aspects of Admiral Gorshkov's life revealed in the three post-Soviet Russian books among their sources. Both the admiral's own memoirs and a detailed biography by Captain M.S. Monakov describe how he was present when both Prime Minister Churchill and President Roosevelt arrived for the Yalta Conference in February 1945. Monakov's book includes pictures of the admiral in the cockpit of an RAF transport, and in a group welcoming Churchill. It says that Gorshkov was impressed by the American warships he observed. Their external condition, internal organization, and discipline made him conclude that the United States valued military professionalism. He found the informality of the Americans he encountered striking: "On the one hand they were sociable and amiable, but on the other exhibited a superior attitude about other countries based on narrow and even provincial outlooks. In addition, he nevertheless admitted to be fair to them, that the easy-going manner of the Americans, at times almost verging on a frank disregard for traditional marks of respect, was a specific reflection of their relatively greater insulation from the abuse and unreasonable orders of 'Authority' and senior officers." (M.S. Monakov *GLAVKOM: Zhizn i Rabota Admirala Flota Sovetskogo Soyuza S.G. Gorshkova*. Moscow: Kuchkovo Polye, 2008, p. 352.)

The idealized "Soviet man" had proletarian roots; citizens played down bourgeois backgrounds, yet both Sergey Gorshkov and his wife Zinadia came from bourgeois families. Gorshkov's father was a noted teacher who had completed university. Well-established in his profession when the Revolution came, he continued to be an outstanding teacher for decades under the new regime and would be awarded two Orders of Lenin for his excellence as a pedagogue. Monakov remarks that the younger Gorshkov did not have a warm relationship with his strict father. Elena Feodosiyevna, his mother, was the daughter of a priest with an excellent command of French. Elena is described by Monakov as "an outstanding example of the intelligentsia "whose influence on young Sergey's character development equaled that of his disciplinarian father." In his memoirs, Gorshkov disarmingly relates that he met his future wife Zinadia in the Vladivostok GUM (department store) when both were with another partner. Zinadia was the daughter of a construction engineer and government administrator prominent in Vladivostok before the Revolution. Educated in a *Gymnasium*, where she had studied English and knew Japanese, Zinadia emerges in Gorshkov's memoirs and the Monakov biography as an ideal navy wife, who learned dressmaking from a French woman during

the Allied intervention after 1918, and earned welcome extra money when her husband was a junior officer through typing jobs and by taking in tailoring. Gorshkov writes about how he valued being able to come home to a warm and well-regulated atmosphere. Zinadia and her children were held captive by a mixed group of German and Romanian soldiers while being evacuated along the Black Sea coast east of Crimea in 1942, but escaped. Gorshkov died at the age of 78 in 1988, only three years after his retirement.

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Alan Raven. British Cruiser Warfare: The Lessons of the Early War. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2019. 320 pp., illustrations, appendices, bibliography, index. UK £35, cloth; ISBN 9781526747631.

There is, perhaps, no learning curve more unforgiving than war. No matter how much preparation takes place before combat, it is in the moment of first engagement when doctrines, technologies, and training receive the test that determines their degree of success or failure, as measured in the lives of the people involved. This curve is especially sharp at the start of any war, when the new looms larger than the old and theory exceeds experience. It is only with the hard trials of such clashes that lessons are learned and adjustments made, which then define practice for the remainder of the conflict.

Alan Raven's book is about this learning curve as experienced by the British Admiralty with cruiser warfare during the Second World War. As a naval historian and a co-author of a comprehensive study of British cruisers that

served in the war, Raven is well suited for such a study, for which he undertook a considerable amount of fresh research. In addition to the traditional histories and specialized monographs, Raven draws upon an impressive range of documentation from British archives, including the action reports, war diaries, and recently declassified histories of wartime signals intelligence. Nor does he stop there, as he exploits German and Italian materials to the extent his language skills make it possible to do so. It is a commendable amount of labour and it is reflected in the detail and comprehensiveness of his book, which make it a valuable resource for students of his subject.

Raven divides his work into two parts. The first is a day-by-day chronology covering cruiser actions from the start of the war in September 1939 to the end of 1941. These range from single-sentence descriptions of attacks inflicted on cruisers, to descriptions of major operations and engagements (such as the Battle of the River Plate) that take up several pages. Raven intersperses these with summaries of deployments and details of the damage suffered by the cruisers during their service. The entries in this section are very factual, with no embellishment and little in the way of analysis of the operations described.

Where the analysis comes in is in the second part of the book. Grouped together as "Summaries," Raven examines in detail every imaginable aspect of British cruiser operations during the first years of the war, from the employment of gunnery for various types of missions (such as surface combat and shore bombardment) to damage control and the use of intelligence. While focused on the cruisers, much of this naturally becomes a more general summary of aspects of Royal Navy operations at this point in the war, with examples of its impact on cruiser operations. Nothing relevant escapes attention casualties, repair facilities, and even the weather conditions and its effects on the ships. There are entries on Britain's primary European adversaries that outline the German and Italian navies and comment upon their respective performances. Raven weaves into the pages of this section a careful yet firm analysis that never supplants his description of the details but builds upon it to support his arguments.

Though each summary can stand alone, when the sections are read together, the Royal Navy's learning curve comes into sharp focus. At the start of the war, the navy relied upon pre-war technologies and instructions developed for an anticipated range of operations. Yet change was taking place even before the war began, as the navy started equipping cruisers with radar and (to a lesser degree) ASDIC for their operations. This effort was accelerated with the start of the war, with forty ships equipped by the end of 1939 alone. Initially used to detect airplanes and surface ships, radar was soon employed in a variety of other ways, from directing gunfire to giving cruisers a new role as fighter direction ships. This reflected an adaptability that the Royal Navy demonstrated in most aspects of cruiser operations, as they accommodated everything from anti-aircraft tactics to damage control operations in light of the firsthand experiences of the crews in combat. By the end of the period, Raven concludes, the navy had learned most of the major lessons to be gained with regard to cruiser warfare, and had adjusted procedures into the forms they would maintain for the duration of the war.

Raven's thorough research and comprehensive coverage combine to

make his book an impressive resource for British cruiser operations in the Second World War. His judgments are measured and fair, and while his criticisms are understated, he does not hesitate to call out the navy for their missteps, such as their failure to change their codes at the start of the conflict. His explanation of the role of signals intelligence in cruiser operations is particularly welcome, as it helps fill in a gap that has understandably (but frustratingly) existed for far too long in understanding of the conduct of our the war. Taken together with his other summaries and his detailed chronology, his book will serve as a valuable asset for decades to come for anyone interested in naval warfare during the conflict.

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Manfred Rech. Das Bremer Schlachte-Schiff. Eine Proto-Kogge mit Heckruder aus der Zeit um 1100. Bremerhaven, Germany: Deutsches Schiffahrtsmuseum and Oceanum Verlag, www.dsm. museum, www.oceanum.de, 2016. 264 pp., illustrations, bibliography. Euro 34,90 €, cloth; ISBN 978-3-86927-076-0.

Imagine a ship—a wreck—lying on a riverbank covered in mud. Time goes by, about nine centuries. Then, one day in 1991, in the German city of Bremen, riverside construction brings to light the remains of what once was a cog. This early cog was the first discovery of a medieval stern-ruddered cargo ship, about 14 meters in length. The cog was a trading vessel used in northern Europe, especially by members of the Hanseatic League, a trade cooperation between port cities in Western Europe and the Baltic Sea. In an ideal world, as a matter of course, one would expect

immediate and effective archaeological recovery and conservation of such rare finds and professional documentation; but not for this cog. The discovery of the damaged wreck close to the city centre was accidental. Only a part of the vessel could be removed while the remainder of the cog lay beyond reach. It may still be lying in wait for future archaeologists to discover.

Financial problems plagued the project prior to the removal of material. Then there were technical and operational issues. The conservation, storage, and documentation of the archaeological finds proved to be somewhat of a challenge. Basically, other finds at virtually the same location attracted far more attention. For example, how did uncovering a partial cog compare with a complete barge from the eighth century? Or what about the discovery of what became known as "Beck's ship". a river barge from the fifteenth century? These too had to be dug up and preserved. Choices, choices... These archaeologists' nightmares seriously reduced the scientific significance of the cog wreck.

Based on the artifacts found with the ship, archaeologists concluded that the cog was used to transport cargo between Bremen, the Rhine estuary in present-day Netherlands and Jutland in the north of Denmark. Ceramics found on site appeared to have come from Normandy, while other pieces indicated designs originating in Flanders. Among the finds was a stone-anchor, possible a souvenir from the Holy Land. Investigators used the carbon-14 dating method (radiocarbon dating) to determine the age of the vessel, combining it with dendrochronological information (tree ring dating) from the wooden parts. The "Schlachte ship" dates back to around 1100 CE and is a transitional hull form, basically an extended dugout

with a rudder.

No matter how battered and damaged over the centuries, this cog still represents an era in which the foundation was laid of a prosperous society. This book is a valuable addition to our archaeological knowledge of ships of the High Middle Ages.

## J.B. Hak

Leiden, The Netherlands

Tyson Reeder. *Smugglers, Pirates, and Patriots: Free Trade in the Age of Revolution*. Philadelphia, PA: University of Pennsylvania Press, www.upenn. edu, 2019. xi+335pp., illustrations, map, tables, notes, bibliography, index. US \$45.00, cloth; ISBN 978-0-81225-5138-8.

Smugglers, Pirates, and Patriots is an in-depth exploration of Luso-Atlantic trade relationships during primarily the eighteenth and nineteenth centuries, between Portugal, England, Great Britain, Colonial America/The United States, Colonial Brazil/Independent Brazil, and the Banda Oriental. It follows two competing philosophies of economic governance-centralized control and imperial negotiation versus republicanism and free trade. The impacts from the push and pull between these two worldviews as western-hemisphere nations struggled for independence from European powers and negotiated their new identities and relationships with Europe and each other are evident in their effects on merchant communities across commodities throughout the Luso-Atlantic. Between Portugal and the United States, the primary commodities that cyclically benefitted and suffered from these impacts during this period were wine, grain, and flour, and between Portuguese colonies in Africa and Brazil and the United States, enslaved peoples, gold, and sugar. These relationships were complicated by wars between European nations in Europe and within colonial properties and grassroots revolutionary movements.

Balanced with the system-level analysis of the Luso-Atlantic diplomatic and economic diaspora is the effective reaction to this system by individual merchants and trading/shipping communities. Merchants and traders were heavily invested in ensuring and promoting open markets in the United States, Portugal, and Brazil, as well as procuring ready investment and cash inflow from British banks in order to maintain the solvency of their businesses. When the political and legal systems worked to their benefit, participants readily functioned within them. Conversely, when tariffs and other impediments to free trade negatively impacted merchants and traders, many sought to circumvent discriminatory laws and customs through primarily smuggling, but also privateering and piracy, the latter to the benefit of revolutionary governments.

Reeder's use of both English and Portuguese primary sources allows for a multi-viewpoint approach to the web of constantly changing international relationships during these politically unstable years. What could have been a narrative of American and English-diaspora agency reacting to relatively opaque Portuguese and Brazilian activities in the Atlantic system is instead a nuanced analysis of often fractious, nebulous, and constantly changing mercantile relationships that existed both within and without formal political systems.

The book is not so much about the people who lived and functioned economically within the Luso-Atlantic system. Reeder uses traders, merchants, lawmakers, revolutionaries, smugglers, etc. as examples to illustrate the evolution of the system, as well as both the direct and indirect effects national and international mercantile and trade policies, and associated diplomacy had on empires, countries, colonies, communities, and businesses. The book is thematically organized, situated within approximately half-century blocks of time that shift forward and overlap as political and economic relationships evolve within the Luso-Atlantic. While I agree that this is structurally the best way to approach this type of system-focused analysis, I found the density of the presented information and subsequent analysis hard to follow. Reeder's coverage of such a broad period and geographical extent, made it difficult to parse what happened concurrently versus sequentially as I progressed through the chapters. This was, however, mitigated by Reeder's regular repetition of thematically important concepts and events throughout passages and in endof-chapter summaries.

When most Americans think about American national history during the revolutionary and early republic periods, they remember what was learned in school and what is most often depicted in popular media, books, television, film, etc. They remember American relationships with England, France, Spain, and maybe The Netherlands, Sweden and Russia, all countries that held a colonial foothold in North America. The role of Portugual, Portuguese colonial expansion, and its influence on Atlantic diaspora trade, especially concerning the movement of gold and the enslaved, is overlooked. Perhaps this is because the idealized goal of many free trade proponents, a hemispherically-connected conglomerate of open independent republics, did not develop.

In Smugglers, Pirates, and Patriots, Reeder successfully establishes that it is impossible to understand the development of the American and Brazilian economies, trade relationships with each other and the European Imperial powers, and the evolution of diplomatic relationships between Imperial Europe and the Americas without fully integrating the Luso-Atlantic into an analysis of this international system. This book is highly recommended.

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John Roberts. *Battlecruiser* Repulse: *Detailed in the Original Builders' Plans*. Barnsley, S. Yorks: Pen and Sword Publishing, www.pen-and-sword. co.uk, and National Maritime Museum, Greenwich, 2019. 160 pp., illustrations, tables, bibliography. UK £30.00, cloth; ISBN 978-1-5267-5728-9.

This work is the sixth installment in Pen and Sword's Detailed in the Original Builders' Plans series, examining the Royal Navy battlecruiser HMS Repulse in both her original 1916, and modernized 1936 configurations, along with interim modifications. Due to the extensive nature of the 1936 modernizations, a second set of ship plans was created. Author John Roberts examines each within this text following the now-standardized Detailed in the Original Builders' Plans format. Following his introductory explanation of the plan types and their creation, Roberts dives directly into the 1916 blueprints. The modernization plans receive their own brief introductory paragraph, followed by a short summary of the Repulse's career. After the last two- page rendering of the 1936 Forward Hold Deck Plans, a single page of sources concludes the work. All blueprints are rendered in full colour and are drawn from the National Maritime Museum's collection in

Greenwich, England.

The introduction covers the genesis of HMS Repulse, from the turn-of-thecentury concepts pushed by Admiral Sir John Fisher into wartime design and construction. Separate sections are denoted to specifically focus on the ship's design, structure, armament, fire control, armour, and engines, with general ship information and an explanation of the included plans concluding the preliminary text. Interestingly, Robert prefaces the examination of the plans with a warning that many details are, in fact, wrong. He postulates that this may be due to the "pressures of wartime production and the need to complete the ship at an early date," which resulted in inconsistent terminology, mislabeled compartments, and inaccurate depictions of such vital components as the ship's propellers (16-17, 26). While these are addressed via Roberts' notations, they raise questions which can be hard to answer due to the ship's sinking so early in the Second World War.

Following the design history are 57 pages detailing the pre-modernization architecture of the Repulse, with the majority based on the 1916 As Fitted drawings. Given that these surviving blueprints are miraculously a set on which the 1918-1921 alterations were denoted, the late and immediately postwar modifications visible are addressed alongside the earlier configurations (16). Ten pages are devoted solely to examining the pre-1931 modifications to a variety of superstructure platforms, all rendered as multi-coloured additions to the older original lines. Some of the rendered pages show their age more than others, with their unrestored discoloration and rough edges hinting at the fragility of these massive, ninefoot-long blueprints. Unique details such as the triple mounts for the Repulse's 4-inch guns receive the detailed

attention one would expect, but innocuous components such as the amount of shells rendered by the draughtsman in ammunition storage bays and the movement of small refits to different positions are just as well documented, impressing one with the level of study undertaken by Robert in crafting his analysis.

Following the large central 1916/1936 gatefold plans is an 8-page section on the 1933-1936 modernizations, focusing largely on the ship's overall career and the specific modifications related to the seaplane hangar and equipment additions. This is followed by 70 pages examining the 1936 As Fitted plans and enlargements in the same standardized format as their earlier 1916 counterparts. The involvement of aircraft with the *Repulse* is its own interesting subset of the ship's evolving design. The 1936 detail plans and appearance on the As Fitted drawings allow for one to see the shift from pure battleship to turret launched biplanes to multiple seaplanes with their unique hangars and launching apparatuses, foreshadowing the increased importance of aircraft in naval warfare. The 1936 plans are also in better overall condition than the 1916 set, providing a greater degree of clarity. The enlarged 1936 As Fitted deck plans are also better represented than their 1916 counterparts, spanning four pages per deck with the relevant cross-section portrayed above in the now-traditional format of the Original Builders' Plans series (136-159). In contrast, the 1916 plans are half the size, spread across two pages and at a scale where discerning markings can be difficult to impossible (20-25). The work has no concluding analysis by Roberts, instead following up the final Forward Hold schematic with a one-page bibliography and an archival guide to the plans

represented in the work.

In terms of possible improvements for future editions, several come to mind. While the positioning of the Re*pulse*'s career summary after the introduction to her 1933-1936 modernization can be understood as a means to bulk up interpretive text for the second half of the work, it does not flow well, as it is a chronology from 1916 to her loss in the South China Sea on 10 December 1941 (83, 86). Splitting this section into preand post-modernization histories would improve the narrative flow and be less jarring, especially given that the brief text is currently interrupted by two pages of schematics and technical summaries (84-85). A conclusion might also be useful, especially as a place to briefly note the unfortunate current state of the Repulse as a war grave, and the pilfering of her remains in recent years by unscrupulous scrap metal merchants using jury-rigged explosives. Finally, the presence of photographs, either interspersed or in an appendix would be a strong addition. Given the sometimes erroneous nature of the plans and the radical visual changes wrought by the vessel's modernization, the inclusion of period photographs could help readers further examine the changes, especially in regard to the seaplane hangars and launchers amidships. Even simple waterline profiles of the Repulse in her various configurations and painting schemes might serve the same purpose. The lack of these components does not detract from Roberts' work, of course, and is merely put forward as a suggestion for possible future editions.

Battlecruiser Repulse is another fine addition to the Original Builders' Plans series, and a solid resource for those studying battlecruiser design, the loss of the vessel, or her remaining wreckage. Roberts' notations and identification of errors present in the plans provides interesting insight into a war-expedited design and construction process, and offers one better understanding of certain design choices made throughout the *Repulse*'s service life. For modelers and students of naval architecture, especially those outside the United Kingdom, these large-scale renderings offer a great primary source previously limited by the size and relative inaccessibility of the originals.

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Ken W. Sayers. US Navy Auxiliary Vessels, A History and Directory from World War 1 to Today. Jefferson, NC: McFarland, www.mcfarlandpub.com, 2019, vii+353 pp., illustrations, glossary, notes, bibliography, index. US \$45.00, paper; ISBN 978-1-4766-7256-4. (E-book available).

The author, former naval officer Ken W. Sayers, set himself the difficult job of listing and describing all the auxiliary vessels of the United States Navy since the First World War. It was indeed a formidable task because of the number of ships, the great variety of ship types and the reclassifications and changes that have occurred over the last hundred or more years.

After preface, glossary а a (much-needed) and an introduction, the book is divided into three chapters or parts. Chapter One describes the combat logistics and fleet support ships that directly supply or support the fighting units. Chapter Two covers support ships that supply oversea bases or provide a range of services that are essential, but are not considered to be "front line". Chapter Three lists a wide range of inactive (i.e. previous) types.

Some of these ships are/were commissioned vessels crewed by U.S.

Navy personnel and have the prefix USS (United States Ship) before their names. Others are operated by the Military Sealift Command (MSC), formerly the Military Sea Transportation Service (MSTS) which had been established in 1949. MSC ships are crewed by civilians and bear the prefix USNS (United States Naval Ship). They are distinguished by a blue and gold stripe on their funnel. One might think the ships in the first chapter would be commissioned USN warships and those in the second, civilian crewed ships. This was generally true during the Second World War but not today-both chapters include ships crewed by either service. Furthermore, some have mixed naval and civilian complements: the civilians operate the ship and the naval personnel carry out whatever specialised task it is designed to do. This system is also used by the British Royal Navy and its Royal Fleet Auxiliary and by the Royal Canadian Navy (RCN) in the replenishment ship MV Asterix. The third chapter also features both USS and USNS ships, as well as those operated prior to 1949 by a variety of government agencies, including the Army.

Within each chapter the ships are listed in alphabetical order of the acronym indicating their purpose. Most, but not all, begin with A for Auxiliary, so AKA means an attack cargo ship. If civilian-manned, there is a prefix T, so T-AKA. There are 400 vessels in 13 different active hull classifications in chapter one, 367 vessels in 14 classifications in chapter two. These list all ships of those types, including, if the type designation is still used, those that no longer exist. Chapter three has 103 hull types that are no longer in service or the type has been renamed.

Obviously, it would be impossible to list the details of all these ships in a volume of manageable size, so representative ships of significant types have been selected for presentation of detailed data and outlines of their service. Going through the book, the excellent illustrations catch the eye and invite a closer look at that section. One is struck by the variety of sizes as well as purpose among all these auxiliary ships. There are large, fast combat support ships (AOE) and small tugs (ATF), submarine tenders (AS) and hospital ships (AH). Within the last decade, new and unusual ship types with strange profiles have appeared: expeditionary fast transports (EPF) developed from an Australian ferry design, and expeditionary sea bases (ESB) that have no commercial equivalent, although they are crewed by MSC civilians, hence are designated T-ESB.

The author has included a very large body of information in this volume, though he probably would have liked extra space to include more accounts of service histories—but which to choose? As the title says, it is a Directory. Even so (this may just be a personal preference) navigating through the book might have been easier if it had been divided into separate sections covering different time periods: say, First World War to Pearl Harbor, Second World War and Korea, the Cold War and Vietnam and from the collapse of the Soviet Union to today. Anyone who has books about USN warships past and present-aircraft carriers, battleships, cruisers, destroyers, submarines and so on, would find US Navy Auxiliary Vessels a useful addition.

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Peter Schenk. *Operation Sealion. The Invasion of England 1940*. Barnsley, S. Yorks: W.W. Greenhill Books, www. pen-and-sword.co.uk, 2019. x+326

pp., illustrations, maps, glossary, bibliography, index. UK £25.00, US \$39.95, cloth; ISBN 978-1-78438-394-7. (First published by Conway Maritime 1990.)

It is somewhat surprising to consider that the massive strategic and logistical preparation for Operation Neptune, the Allied amphibious landings at Normandy in 1944, was not the first effort toward a cross-Channel invasion. While the body of English-language historic knowledge is not completely devoid of knowledge about Nazi Germany's planned invasion of England, there are very few deep-dive research Peter Schenk, in this newly works. revised English edition of Operation Sealion: The Invasion of England 1940, provides an incredible wealth of detail and technical understanding of the German amphibious assault that never was. He analyzes the German strategic situation following Dunkerque, as well as the evolution of German naval leaders' opinions about crossing the Channel; he contends that the German Navy was neither trained, prepared, nor equipped to conduct a successful assault if they were ordered to. Drawing on an impressive depth of research in the often un-seen German military archives, Schenk provides unparalleled detail about the ad-hoc approach taken by the Wehrmacht, Kriegsmarine, and Luftwaffe to gather or build the landing craft, personnel transports, assault craft, amphibious tanks, and ferries, as well as actually planning the invasion in a three-month period. The book is arranged thematically with two major sections accounting for the bulk of the work, which combined with Schenk's intricate level of detail, tends to wear on the reader; however, the sections are broken up by exceptional diagrams and a remarkable collection of photographs.

After a short overview of the Ger-

man Western Offensive in May 1940 and the intentions of the various German military leaders from General Jodl and Field Marshal von Brauchitsh to Admiral Raeder and General Göring, Schenk enters into the details of the various logistical requirements assembled for the invasion. In the first major sections of the book, the reader is taken through the impressive array of large transports and landing craft the Germans arranged in preparation for the Sealion landings in the summer of 1940. The variety, in both size and capability, of the vessels is astounding to behold and speaks clearly to the fact that such a feat had never before been attempted in the modern era. It is also apparent that the Germans were keenly aware that they were making it up as they went along.

Throughout the first major section, which deals with the composition of the invasion fleet, Schenk presents each type of vessel and extraordinary details about their capability, their intended role in the invasion, and their place in the organization of German forces. Additionally, this section contains some of the most fascinating details of the German preparations that distinctly highlights how unique and novel an operation like Sealion was to a nation with no experience in amphibious warfare. Schenk provides the reader with the technical details and thought processes behind the several methods of adding ramps to landing craft, segmented landing bridges, submersible and amphibious tanks, and the Luftwaffe's participation to attach propellers to landing barges, creating airboats as landing craft.

The book's second major section applies the same penchant for detail to the larger in scale, but narrower in scope, topic of the actual invasion plan. Through extensive use of primary source material, Schenk presents

the unique difficulty Germany faced in preparing so immense an endeavour, though that fact is often lost in the same thematic arrangement as the earlier section. Schenk addresses the naval matters of transport but also covers the Wehrmacht's plans once ashore, because an amphibious transport and landing is for naught without a plan to successful invade England beyond the With over 20 separate beachheads. operational planning maps and more than 15 original planning diagrams, the complex nature of Sealion is presented as far more than the "paper tiger" it is often asserted to be.

Schenk argues that despite German military leadership's impression that Sealion would be a tragic misstep, the planning and preparation efforts would have likely generated a successful landing, though perhaps not a successful invasion. This argument is clearly validated in the German records of the planning and logistics portions of Sealion in the summer of 1940. The mind-boggling level of detail reveals the real complexity of planning a major amphibious operation and Germany's ability to conduct one. This overarching theme is often lost in the recesses of the sometimes microscopic detail Schenk provides. The novelty and difficulty of the German attempt to invade England in the summer of 1940 is wonderfully summed up in the author's epilogue and the final section of the book which discusses the final fate of Sealion. This book is a must for any student of operational planning, wartime logistics, and amphibious operations; however, one should break a cardinal rule of book-reading, and reading the epilogue first to ingest the details with solid context.

Joe Eanett Annapolis, Maryland Greg H. Williams. *The United States Merchant Marine in World War I: Ships, Crews, Shipbuilders and Operators.* Jefferson, NC: McFarland Publishing, www.mcfarlandpub.com, 2017. 472 pp., illustrations, bibliography, index. US \$55.00, paper; ISBN 978-1-4766-6703-4. (E-book available.)

The literature of the First World War at sea is dominated by accounts of the naval forces. A particular fascination with Jutland competes with the response to submarine warfare. For those whose interests extend beyond the north Atlantic, there are books about the various commerce raiders from *Graf Spee* to the *Seeadler*. When the merchant marine appears on the scene, it is largely in the context of victims of those submarines, although there are entries in the literature about the loss of merchant ships and a brief revival of wooden shipbuilding in response to the emergency.

Greg Williams is an active chronicler of the United State merchant marine in wartime. In a series of volumes from McFarland since 2002, he has authored Civil and merchant vessel encounters with United States Navy ships, 1800-2000 (2002), Civil War suits in the U.S. Court of Claims (2006), The French assault on American shipping, 1793-1813 (2009), World War II U. S. Navy vessels in private hands (2013) and The last days of the United States Asiatic Fleet (2018). The brief biography on the back cover acknowledges Williams' four years in the US Navy, including time served on a converted Liberty ship, and his having sailed with the volunteer crew on the 1994 voyage of the Jeremiah O'Brien from San Francisco to Europe. In this volume, Williams set out "to produce a reasonably comprehensive account of the American merchant marine during the Great War. (1)"

Williams latest work largely follows a familiar formula. At its heart it is a book of lists: of steamship companies and of shipyards and the vessels they operated or built. Around this core are a number of brief chapters which provide more historical context and more ship lists. The back cover claims that the title draws on "contemporary newspapers, magazines and trade publications, and Shipping Board, Department of Commerce and Coast Guard records." The bibliography runs only two pages and cites only published volumes. There are no footnotes, although on occasion you will find inline citations like: "One aspect of Wheeler's time in Congress was written about in the Buffalo Courier on Saturday, July 18, 1891." (295) This introduces a half-page, reduced font, three-paragraph quote. The volume is full of quotes, many of them at considerable length. It should be noted that the 16-page, 3-column index is particularly useful.

The list of shipping companies runs for a full 100 pages. Each entry names the company, and gives an address. Beyond that, the amount of information varies considerably. The Western Mercantile Marine Corp. of San Francisco rated one line, noting the firm of which it was a subsidiary and naming its president (216). More common are entries like that of the Standard Oil Company of New Jersey which rates three paragraphs (200-10). These named the principal officers, and the tanker Calo*ria*, which had been requisitioned. He refers to another 51 ships but names only the nine 10,000 ton-tankers. At the end of the entry comes the typical summary: "The company managed one Shipping Board steamer and managed and operated four ships." Unfortunately, Williams does not explain the relationship of those "four ships" to the rest of the 51 vessels. Most of the longer entries embrace the same level of detail

and then include a summary of facts from a legal case. For example, the entry for A. D. Carver of New York, owner of a pair of schooners, runs two full pages thanks to the minutiae of a case involving the *Betsey Ross* (118-20). It may be a limitation of Williams' sources, but in some instances, there is more to the story. The account of George Hall Coal and Transportation (163-64) is inflated with a quote relative to the Seaman's Act of 1915, but misses the fact that not one, but four, of the company's fleet were acquired by the United States Shipping Board and taken to sea. Hall bought them back after the war for considerably less than the government paid for them.

Another 135 pages deal with shipyards. This section is longer because, in addition to the background on the yard, each entry attempts to supply information on the vessels constructed in it. The ship details include name, tonnage, speed, fuel, type, year delivered, official number, call sign, private owner or manager on behalf of the US Shipping Board. Williams notes that many of these formed the backbone of the U.S. merchant fleet at the beginning of the Second World War, which justifies notes about their losses in that war (which may overlap with research for his 2018 title on the Asiatic fleet). Quite reasonably, Williams largely confines the list to vessels that were actually delivered by the end of 1918, which makes some of the entries surprisingly short. The American International Shipbuilding Corporation at Hog Island rates a page. The author notes that four ships were delivered in 1918 with 118 more before 1921, but lists only two, both of which were delivered after the Armistice (301-2). On the other hand, the entry for Fore River Shipbuilding of Quincy, Massachusetts, (312-4) includes eight vessels built between 1914 and 1916, but supplies information on

the war service of only one these.

Another major section lists the vessels requisitioned for the Naval Overseas Transportation Service (NOTS). Operated by the United States Navy and crewed by enlistees rather than merchant mariners, the NOTS could move troops, munitions and food to Europe at a fraction of the cost. The use of American enlisted personnel was partly justified due to concern regarding the sympathies of the various nationalities of the sailors serving on Americanflagged vessels in the period. Contemporary newspaper reports of sinkings that listed crew members, often found only a handful of Americans on board, and some of those had only recently taken up citizenship. As with the other sections, this is largely a list of vessels, both great and small, but punctuated by two extended sections drawing on legal cases: the Royal Holland liner Zeelandia (365-6), and the salvaged German tanker Gut Heil / Sara Thompson (368-71).

Reinforcing these core sections are shorter chapters on elements of the merchant marine in the First World War. Much of the discussion of neutral trade in the first chapters is presented in brief introductions and stories of individual ship experiences and sinkings. Almost the final chapter is another extended list: American ship losses. This includes accounts of various "raiders" including *Triumph*, *Wolf* and *Seeadler*.

As a history of the American merchant marine in the First World War, this volume is episodic and poorly documented. Nevertheless, it includes a lot of information that could be used to further the exploration of a critical dimension of America's responses to the demands of the First World War.

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