BOOK REVIEWS

COCKER, M. P. Mine Warfare Vessels of the Royal Navy-1908-to date. Shrewsbury, Airlife, 1993. 223 pp, 120 photographs. ISBN 1 85310 328. Price £22.95.

(reviewed by D. K. Brown, RCNC).

This book is claimed to be a complete guide to all minelayers and sweepers from 1908. Despite some inclusions, with only marginal claim to either category, there are amazing omissions. There is no mention of the numerous destroyer minelayers of both wars, nor of the minelaying capability of submarines and aircraft. The description of mines is, at best, ambiguous—'The magnetic mine is attracted to the built in magnetism of a ship . . .'

There are numerous errors and repetition of hoary myths; for example— Latona is said to have exceeded 49 knots. I would be most interested to hear of any valid case of speeds in excess of 36.25 knots from this class. The TONS are said to be of all wood construction and the later composite vessels cancelled. There are many others and therefore it cannot be recommended as a reference book.

J.Nav.Eng., **34**(3), 1993

ENGLISH, John. *Amazon to Ivanhoe*. Kendal, World Ship Society, 1993. 144 pp, 188 photographs. ISBN 0 905617 64 9. Price £13 (£10 to WSS members). (reviewed by D. K. Brown, RCNC).

This further World Ship Society book describes the destroyers built for the Royal Navy between 1924 and 1935, together with 8 ships requisitioned at the outbreak of the second World War. The illustrations are very well selected with many little known shots, including sad scenes of sinkings. They are also well reproduced. The career of each ship is described in some detail, with approximately a page to each ship. The research work of the World Ship Society goes far to guarantee the accuracy of this work.

The design history begins in 1923 with three studies by the Director of Naval Construction (DNC), which were based on the improved V & W class. Five shipyards, experienced in destroyer design, were invited to submit proposals based on these studies. Thornycroft and Yarrow were selected to build the prototypes. After prolonged trials, DNC designed the follow on ships. On completion, the first ships of the A class, were the best destroyers in the world. But the repeat ships gradually fell behind those of other navies in capability. In particular, the USN took the lead in guns, fire control and above all in ship technology—high pressure steam giving economy, unit machinery arrangement, welding and longitudinal framing etc. The author is a little weak in these aspects and is mistaken when referring to *Acheron*'s experimental machinery plant, saying that her problems lay in the boilers. The serious problem lay in vibration of the first stage turbine blading.

It is a well written and well produced book and its importance lies in studying the reasons for this evolution from excellence in the A class to obsolescence in the I's.

HAGUE, Arnold. *Sloops 1926–1946*. Kendal, World Ship Society, 1993. 124 pp, 152 photographs. ISBN 0 905617 67 3. Price £13 (£10 to WSS members). (reviewed by D. K. Brown, RCNC)

This book follows the style of earlier World Ship Society monographs on warship classes. It is appropriate to note the excellent work carried out, as editor of this series, by the chairman Michael Crowdy who retires 37 years after he founded the society.

There is a 13 page design history of 71 pre-war sloops of the RN, RIN and RAN which shows that the Admiralty was more far-sighted than is usually thought. When the design of the first began in 1924, it was hoped to build a prototype with diesel engines for comparison with one with steam. But British industry could not offer a suitable engine and the government were not prepared to buy abroad. The emphasis was on minesweeping, which forced the accommodation onto the upper decks, and on anti-submarine warfare. All guns had to be capable of high angle anti-aircraft (AA) fire. It was recognized that their role would be as policemen in peacetime, but this was secondary to their war role.

By the late 1930s, sloops carried a very heavy AA armament as well as a full anti-submarine fit, and can only be criticised on the grounds of cost. The main part of the book consists of individual ship histories, which are detailed and accurate. Typically, it is a ship to a page with one or sometimes two well-selected photographs and text. The post-war history of the survivors is recorded and there are some interesting photographs of mercantile conversions and of modernizations carried out by other navies. There are tables of pennant numbers, disposals and of sinkings by these sloops. 660

HATTENDORF, Professor John B.(editor). *The influence of history on Mahan*. Newport (Rhode Island), Naval War College Press, 1991. 208 pp, 13 illustrations. Price not known, paperback.

(reviewed by D. K. Brown, RCNC)

In May 1990 the US Naval War College held a conference to mark the centenary of the publication of Mahan's best known book *The Influence of Sea Power on History 1660–1783*. This book presents the text of the 16 lectures given at the conference.

In general, the emphasis is on Mahan's influence on contemporary navies and on the way in which he was influenced by the thinking of the day. It is interesting that there are two essays on his influence on the German Navy, and others on the Japanese and Latin American navies, but not one on the Royal Navy. Several speakers suggest that Mahan was much more widely quoted than read. One speaker suggesting that few read beyond the introduction and the first chapter on elements of sea power, whilst another refers to his writing as 'heavy going'.

The Influence of Sea Power on History is described as 'plodding chronology', a view supported by the speed at which recent 'popular' versions arrive in the remainder shops. Yet Mahan was widely quoted and was treated as the prophet of sea power in general and the battle fleet in particular. It would seem that he was preaching to the converted. Mahan believed in the concentrated power of the battle fleet and was prone to dismiss the threat of a *guerre de course*. Since most of his writing was before the submarine became effective, there may have been some justice in this attitude.

There is a biographical note by his son and another note on the influence of religion on Mahan. The conference theme is of current significance—how to persuade governments to spend on a big navy—while the essays throw considerable light on naval programmes of the early 20th century.

JOHNSTON, Ian. *Beardmore Built. The rise and fall of a Clydeside Shipyard.* Clydebank District Libraries and Museum Department, Glasgow, 1993. 192 pp, 148 photographs, 24 diagrams. ISBN 0 0906038 08 2. Price £14.95 hardback. ISBN 0 906938 05 8. Price £9.95 softback.

(reviewed by D. K. Brown, RCNC).

William Beardmore opened his shipyard in 1905, the last big yard on the Clyde. It was spacious, well planned and used the most up to date technology available. Though it built a considerable number of major warships, including the first aircraft carrier, *Argus*, and some merchant ships, it was the first big yard to close in the post war slumps. It was not only a shipyard but built army guns, railway engines, many wartime aircraft and a few airships.

This fascinating book describes the building of the yard and its supporting structure, such as the tenements—good for their day—for the workers. There is then a section on the techniques used in ship building and engineering, in an advanced yard prior to World War 1. In 1912, Beardmore's proposed an aircraft carrier design to the Admiralty and though it was not adopted, it influenced several wartime ships. One feature, a double island, each side linked by a bridge is seen in the photograph of *Argus* fitting out. Wind tunnel tests showed this was unsatisfactory and *Argus* completed as a flush deck ship. The photograph also shows that Beardmore used pre-fabrication at this early date. Despite its advanced methods, Beardmore's were unsuccessful in winning enough orders in post war years and was the first to close in 1930, possibly because they were over capitalised.

The photographs are well selected and generally unfamiliar. Many are of work in the shops or of ships fitting out; that of *Ramilies* on the slip, shows the appearance of early torpedo bulges. The text is very readable, informative and the book is recommended. KAUFMAN, Yogi and STILLWELL, Paul. *Sharks of Steel*. Annapolis, U.S. Naval Institute, distributed in U.K. by Airlife Publishing Co, Shrewsbury, 1993. 152 pp, mostly coloured photographs. ISBN 1 55750 451 2. Price £19.95. (reviewed by Commander R. Compton-Hall)

Sharks of Steel follows part of the excellent American, Discovery Channel TV, submarine series of the same name. The colour photographs which occupy most of the book are superb; it is safe to say that nothing approaching their quality has been published in one volume before. The captions are lively, informative and economical.

The text is thoroughly readable; it is clearly written with authority and from personal experience. Yogi Kaufman (Vice Admiral retired) is a renowned character; he was one of the few who had no fear of Rickover. Paul Stillwell is Director of History at the U.S. Naval Institute.

We learn intriguingly intimate details about wartime and modern submarining in the U.S. Navy; and there are fascinating glimpses of life aboard a Soviet Typhoon SSBN as well. However it is the photography, by Yogi Kaufman and his son Steve, that lifts the book way above the norm. *Sharks of Steel* was not, apparently, produced for naval public relations purposes but, all the same, it does a marvellous job for the USN submarine image. The Royal Navy's submariners might care to take note, at a time when the House of Commons Defence Committee has been moved to say (in the sixth report dated 12 June 1991):

The Submarine Service is an elite and somewhat self-contained world; as a result, the role of submarines can be misunderstood, underestimated or neglected. We consider that one priority task for Flag Officer Submarines and for MoD is to look at ways of increasing professional, parliamentary and public understanding of the Submarine Service.

Amen to that. Is there a genius here, who can equal Yogi's depth of knowledge and skill with a camera?

KEMP, Paul. Convoy Protection, the defence of seaborne trade. London, Arms and Armour, 1992. 124 pp, 96 photographs. ISBN 1 85409 037 2. Price £17.99. (reviewed by D. K. Brown, RCNC).

The author has chosen an interesting theme, using two case studies, to examine what happens if merchant ships are not convoyed when under threat of submarine attack. The selected cases are the Royal Navy in World War I and the Japanese Navy in World War II. There is a brief review of the historic approach to convoy, its success and how opinion moved against convoys with the introduction of the steamship.

The problem in World War I was a classic example of inadequate staff work; for too long it was believed that there were 5000 ships entering or leaving British ports each week; a ridiculous figure swollen by the many small coasters hopping from one port to the next. Eventually Commander R. G. Henderson, later a great Controller, realized that the true figure for ocean-going ships was about 50 arrivals and 50 departures a week. While it might have been impossible to convoy 5000 ships, it was not to difficult to provide escorts for 100. Conversely, the loss of 10 ships a day did not seem too bad against 5000 movements, but was disastrous against 100.

Once introduced, the convoy system speedily defeated the U boat threat. Convoys were hard to find and were well protected. But it was not the loss of submarines which defeated the German force, but loss of trained crews. It is a pity that the author did not look more closely at how near the UK was to defeat in April 1917. Though defeat was approaching, as ships were being sunk far faster than they were replaced, it was probably not yet imminent.

The Japanese Navy of World War II was obsessed by the power of the battle fleet (see Mahan book reviewed in this issue). Though they went to war to obtain the mineral resources of the South Pacific, they failed to consider the safety of the ships carrying these minerals to their homeland. Both the Japanese and the USN had envisaged submarines as an adjunct to the battle line in their pre-war plans and Commanding Officers were required to operate to the Prize Rules.

A signal from Admiral King changed this, on 7 December 1941, when he ordered unrestricted submarine and air war against all Japanese ships. The US submarines had only limited success in 1942, with their well-known torpedo problems, Commanding Officers who failed to adapt to war and a continuing diversion of submarines to attack fleet units, whose position had been obtained by code breaking. The whirlwind struck in 1943 and 1944. Japanese losses soared far above the rate of new construction and the author contends that the US submarine offensive had defeated Japan, before the Hiroshima atomic bomb, a view now quite generally accepted.

The lessons seem clear: a maritime power can be defeated at sea if it fails to protect its ships (or more precisely, its cargoes). Protection of sea lanes (SLOC) is meaningless and ineffective; only convoy can provide the concentration of force needed to defeat the threat.

McKAY, John and HARLAND, John. *The Flower Class Corvette Agassiz*. London, Conway Maritime Press, 1993. 160 pp, 29 photographs, many drawings. ISBN 0 85177 614 0. Price £24.

(reviewed by D. K. Brown, RCNC).

This latest volume in the 'Anatomy of the Ship' series, follows the usual format with 124 pages of beautiful drawings by John McKay forming the principle feature. The drawings cover all aspects of *Agassiz*, as built and as later altered, with brief treatment of her derivatives of the modified FLOWER and CASTLE class. Numerous isometric drawings help considerably to understand the layout of the ship. There are also a number of drawings of the four cylinder, triple expansion engines of which some 1150 units were built and of the boilers.

The brief but informative text by John Harland is based on his extensive research for his definitive history of whale catchers, (reviewed in *JNE* vol 34 no.1). *Agassiz* (pronounced Aga-see) was selected as representative of the original short forecastle design of corvette, as opposed to the long forecastle configuration to which she was converted and represented by the museum ship *Sackville* in Halifax. The RCN of World War II has been described as a 'Corvette Navy' and as they were so numerous, this title is not inappropriate.

The text covers the design background as a coastal escort, later forced into ocean use for want of an alternative, and the operational history of *Agassiz*. As in his earlier book, Harland is particularly good in describing the auxiliary machinery, so important but rarely mentioned in history. The FLOWERS made an important contribution to victory in the Atlantic and this book is a worthy tribute to them.

ORAM, H. K. (edited by Wendy Harris). *The Rogue's Yarn*. London, Leo Cooper, 1993. 249 pp, 26 photographs. ISBN 0 85052 285 4. Price £17.95. (reviewed by D. K. Brown, RCNC)

The Journal does not usually review the reminiscences of seaman officers, but this one is different. Captain Oram published an autobiography in 1974 (*Ready for sea*), which covered his early career as an apprentice in a fully rigged ship, his RNR training in a battleship at the outbreak of World War I, Jutland in a destroyer and submarine service (including the 'Battle of May Island'), in which the steam submarines K4 and K17 were lost. Readers of that book have waited impatiently for a second volume.

Captain Oram was reluctant to cause further distress in relating the story of the loss of the *Thetis*, of which he was a survivor and only in old age did he record his

later career. Wendy Harris has done a fine job in editing his tapes and the new book is fascinating. The events described in the first book are dismissed in the first 42 pages. Much of the following section is devoted to the author's views on the inter-war Navy and, in particular, officer training. This is mixed with pleasant memories of his surface ship time in Hawkins, on the China Station. Returning to submarines, Oram commanded the L12 as a training boat and was also responsible for giving lectures to young offices. As a result he had to develop a new course in engineering for potential Commanding Officers. Rightly, he rejected the previous approach of trying to teach engineering design in one month and concentrated on operation with a dash of maintenance. Later he was court martialled and acquitted, when his submarine rammed and sank the H47. After a shore job with the Director of Naval Equipment, he went back to China firstly as 2nd in command of the 5th Submarine Flotilla, and then commanding the destroyer Bruce, with exciting clashes with pirates and an active social life. Returning over the Trans-Siberian railway, Oram became Captain (S) at Fort Blockhouse and, as such, joined the Thetis for her trials on 1 June 1939. The causes of the disaster are well known, but become so much more vivid when told by one of the four survivors (out of 99). It is well said that one mistake can cause an accident, but it usually takes more than one to cause a disaster.

Wartime service in command of *Hawkins* concluded his naval service and his active life on retirement is only briefly mentioned. It is an unusual book with enlightening glimpses of the old navy between the wars, of submarine operation and of disasters and is well recommended.

POLAND, Rear Admiral E. N. *The Torpedomen—HMS Vernon's history from* 1872–1986. 415 pp. ISBN 0 85937 3967. Privately published at £29.50, proceeds go to Portsmouth Naval Heritage (Vernon book), to which cheques should be made payable, and sent to Commander A.J.W. Wilson, Jolyon, Salthill Road, Fishbourne, Chichester, West Sussex.

(reviewed by Commodore S. Taylor)

As a Whale Island trained gunnery officer, at which august establishment we learnt and benefited from the culture of partnership with the weapons and electrical officer, I felt both honoured and pleased in being asked to review the history of the great rival alma mater. Any tribal prejudices evaporated, secure in the knowledge that the torpedo branch was sponsored by the father of naval gunnery, the revered Jackie Fisher; even the authors biased comparisons of the traditional disciplined drill fanatic from the Island, compared to *Vernon's* more radical inventor, developed through the new technological applications below the surface, failed to dampen my enthusiasm for this book. However this difference may explain the large number of 'typos' I found! There is still a need to encourage both of these traditions.

Admiral 'Nico' Poland, a renowned TAS officer, supervised a team of experts to write this book; it charts a history of the TAS and MCD branches from inception, when torpedo development was transferred from HMS *Excellent* to a new floating establishment up Porchester Creek, called the *Vernon*, until the present day.

It is both thoroughly researched, and just as important, readable. Whilst reading it I looked forward to the next opportunity to continue, which to me is the hall mark of the author's success or failure. The 415 pages are packed with fact, with no attempt to introduce or develop any thoughts on political or strategic lines—these are left very much to the readers mind. What happened to the 'All of one company' concept? Have we lost the uniformed ability to invent? Why, today, do we have a user with little formal technology training and a provider lacking in tactical training? Will the Officers Study Group put this right?

What constantly leapt out of the pages to me, was the continuing message of user innovation in the field of weapon development; the benefits of user application to research and development; the lessons from recent history which appear to be all too readily ignored in meeting political (and hence financial) designs (the mines); and the ability of yesterday's Admirals to get things done without a plethora of discussion papers, committees and an all pervading environment controlled by administrators.

Whether your interest be mines and their clearance, torpedoes, sonar (and I always remembered the old excuse for failing to gain contact being due to the prevailing conditions falling outside the boundary of sonic feasibility), wireless, the history of the Electrical branch, or a desire to increase your knowledge of 'the Andrew', this book will fulfil a welcome need. Did you know for instance that according to one sailor, electricity is 'a suitable and himponderous fluid invented by Captain Fisher'?

The foreword, by HRH The Prince of Wales, aptly sums up the effect this book had upon me. "The spirit of those torpedo men lives on, and this book should ensure that their contributions to the Navy and to the Country will not be lost to future generations". A sort of Naval Engineering Standard on underwater weapons!

ROSS, A. L. *The Escort Carrier Gambier Bay.* London, Conway Maritime Press, 1993. 128 pp, 200 line drawings. ISBN 0 85177 613 2. Price £20.00 (reviewed by D. K. Brown, RCNC)

The general style of 'The Anatomy of the Ship' is maintained with a short text (18 pages), a section of photographs, followed by the detailed drawings. In the case of the *Gambier Bay* much of the text, understandably, devoted to her heroic end in the battle of Samar (25 October 1944). In consequence, the description of the ship is more brief than usual. This is a pity, since the CASABLANCA class were generally held to be the finest escort carriers of World War II and a comparison with other classes would be of interest. Her building time is given as 171 days. It would have been valuable to have the equivalent man days and cost, as it seems that the very short building times were extravagant in resources.

The photographs are magnificent showing the ship during building, clear general and detail views and some action shots. The drawings are of high quality, but one may query the selection. There are minute details of the armament but no structural section, nor of the expansion joints which were an important feature of the design. The bomb stowage and fuel arrangements, which were generally improved over earlier US ships, are not illustrated. It is an interesting and well produced book, which could easily have been better.

TYLECOTE, R. F. *A History of Metallurgy*. London, Institute of Materials. 2nd edn, 1993 205 pp, maps, facsimiles, illustrations, bibliography. ISBN 0 901462 88 8. Price £35.

(reviewed by Dr B. N. Hall)

Metallurgy, a science having origins from the earliest times, has now become part of 'Materials Science'. A somewhat vague all-embracing title, reflecting perhaps the academic interests of those who predominate learned societies rather than the interests of manufacturing industry, where metallic materials still predominate. The 2nd edition of this volume is thus now published by the Institute of Materials.

The late Professor Tylecote was pre-eminent in archeometallurgy; this edition updates his classical work with specific revision of the period following the break-up of the Roman Empire and, of particular interest to UK readers, the chapter on the Industrial Revolution.

An obvious difficulty exists in presenting a progressive account of man's exploitation of metals. This is because the development in the winning and working of metals and alloys, occurred at greatly differing periods in various

parts of the world. Despite this obstacle, the author presents a logical account of developments from the Neolithic period, through the bronze and iron ages, the medieval period, the Industrial Revolution and up to the mid 20th century. The large format, more similar to a technical journal than a textbook is an advantage, as it allows the many illustrations to be studied alongside the appropriate text. The earlier developments in the Far East, Middle East and Africa are of particular interest; many of the facts revealed, will surprise most readers by showing the high degree of technological ability demonstrated. No less impressive is the account of bronze casting; the production of bells was the largest metallurgical enterprise of the medieval period and the techniques were eventually applied to the manufacture of cannons. The accounts given are excellent, but some cross-referencing to other chapters is necessary due to the discrepancy in chronological development mentioned earlier.

Any reader who has visited the museum complex at Ironbridge, will appreciate the eventual significance upon Britain's industrial development; the author's description of iron production, both in Shropshire and elsewhere, is excellent. Steelmaking on a large scale in the 19th century is also well accounted for; later developments, including welding, extraction of nickel and the platinum group of metallic elements, into the present century are briefly mentioned.

A final chapter acknowledges the contributions of scientists to metallurgical developments; excellent appendices include a technical glossary, which the non-specialist will appreciate, and maps identifying historical sites.

The volume is highly readable and can be recommended not only to the metallurgist or archaeologist, but to engineers and anyone interested in technological development.

WORSLEY, John and GIGGAL, Kenneth. *John Worsley's War.* London, Air Life publishing Ltd. 116 pp, 68 illustrations in monochrome, 20 in colour. ISBN 1 85310 257 1. Price £19.95.

(reviewed by K. Donnelly MCSD)

Many very fine British artists were active during the first half of this century and during the Great War a number of them were appointed as official war artists; the first in 1916, being the Scottish artist Muirhead Bone, with the rank of 2nd Lieutenant.

Bone's appointment led to the formation of a committee in Wellington House, eventually part of the Department of Information, to deal with official war artists and the work they produced. Other appointments followed including William Orpen, John Lavery, C.R.W. Nevinson and the Nash brothers, John and Paul. The well known Norman Wilkinson, not an official war artist, was the inventor of dazzle painting on ships and eventually headed an Admiralty team engaged on the project during the war.

At the outbreak of the second world war, a committee was formed by the art historian Kenneth Clark. Their task was to mount, at the National Gallery, a permanent exhibition of work by the various services official war artists, so continuing the work done during the Great War. The work of John Worsley, the subject of this book review, had been recognised by Kenneth Clark who convinced his advisory committee that this artist deserved a special place in the permanent exhibition. John Worsley is to this reviewer, an artist in direct line with his illustrious predecessors.

This publication could be described as two books in one. In the first place, it is a very readable account of his war experience as a sailor. Secondly, it is a fine collection of some 68 illustrations in monochrome, mostly pencil plus pen and ink, wash drawings and 20 paintings reproduced in colour. The pencil drawings, reproduced as usual in half-tone are exceedingly well printed on good quality paper, as are the colour plates.

After a childhood in Kenya, John Worsley studied at Goldsmiths School of Art and joined the Royal Navy in 1939, aged 20. He served in various theatres of the war, continuing to draw and paint when off duty. In July 1943, while serving in HMS *Devonshire*, he was instructed to report to the Admiralty for an interview with Admiral Sir William James, who informed him of his appointment as an official war artist. Placed on the staff of the Commander in Chief Mediterranean, he was sent to Malta where he began to paint in his official capacity.

Active during the attack on the Italian mainland and in the Adriatic, he was finally captured by the Germans and held in solitary confinement, before being imprisoned as a POW in Marlag 'O', near Bremen. He continued to work in captivity and many of his creations of this period are reproduced here.

John Worsley's predecessors in the Great War experienced terrible conditions (see Paul Nash, Outline P.20 letter to his wife) and many took an active part in the fighting, but this reviewer has no knowledge of any being captured by the enemy.

The pencil drawings in this book are fine examples of the media. They are free, expressive and bold, while having the unmistakeable stamp of truth and the underlying care of the professional; the latter point being often missed by casual observers and television presenters, anxious for whatever reason, to present artists who slap on paint etc, as quickly as possible. There are no gimmicks here, no striving after effect.

With such fine work one finds some difficulty in selecting any particular illustrations for special mention. But the sureness of perspective from a difficult position (page 25 'HMS *Wallace*, East Coast Convoy 1941') and the expressive drawing of features (page 28 'In the Tailors Shop'), give great pleasure. The paintings too are well reproduced despite their small size, particularly appreciated are 'Funeral from the Merchant Service POW camp Milas Nord' and the 'Naval and Royal Marine POW's on a forced march'.

This book is highly recommended, not only to professional and amateur artists, but to all interested in the visual arts. Anyone examining the pencil drawings alone should learn a great deal from this publication. The constant examination of fine works of art, being the best tutor of all.

One minor quibble is that no sizes of the originals are given, for this reviewer a curious omission especially where the paintings are concerned. Perhaps in a future printing this could be rectified? There is also a mix up of titles on pages 40,41 and 42, but the drawings are easily recognisable.

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