BOOK REVIEWS

CARUANA, A.B. History of English Sea Ordnance, Vol II, The Age of the System 1715–1815. Jean Boudriot Publications, Rotherfield, 1997. 510 pages 193 Illustrations. ISBN 0 948864–21–4. Price £70 (including postage). (reviewed by Eur Ing David K. Brown, RCNC)

At the beginning of this 100 year period the Royal Navy used a mixed bag of guns which frequently burst and were served with unreliable powder. By 1815 there was a range of reliable guns, which could fire faster with more powerful and consistent powder. The author leads us through the five great wars of the century—The War of Jenkin's Ear, the Seven Years War, the War of American Independence, the French Revolutionary War and the Napoleonic War. For each period there is a description of the types of ship involved and the numbers in service. The standard outfit of guns is given and mention made of the many exceptions.

The guns themselves are described in detail with many drawings, some contemporary, others specially drawn for the book. It is sometimes not clear which guns became a standard pattern and which were an unsuccessful trial piece. There are numerous tables listing charge weights, projectile storage and the many tools and fittings needed to operate a numerous battery of heavy guns.

There are chapters on special weapons such as mortars and howitzers. There is a fascinating chapter on how to fit out and use a fireship. The development of the carronnade is covered at length. It is sometimes difficult to follow the passages on strength of materials and metallurgy as the author tends to use contemporary words and ideas rather than translate into modern terms.

Improvement came just in time. William Congreve the older tightened up the specification for the manufacture of powder so that it was both more powerful and could be stored for longer periods without deterioration. William Congreve the Younger also designed a number of successful guns, particular those with short barrels. Thomas Blomefield tightened up the methods of proof testing—it is said that 500 guns failed proof in one year under his more rigorous procedures. Having shown the failings of existing designs, he set to work to do better and designed a gun which was very much stronger and would serve for half a century. In particular, Blomefield's guns did not burst when they got hot, permitting a sustained high rate of fire. He joined Woolwich Arsenal as a major in 1780, dying in much the same job as major general in 1822.

CLOWES, W. Laird. *The Royal Navy—A History from the earliest times to* 1900 (Vols 2–7). Chatham Publishing, London, 1996–97. Price £18 each volume (paperback).

(reviewed by Eur Ing David K. Brown, RCNC)

Volume	Dates	Pages	Illustrations	ISBN
2	1603-1714	632	115	186176 010 8
3	1715–1793	640	85	186176 012 4
4	1763-1804	637	98	186176 013 2
5	1803-1815	642	76	186176 014 2
6	1812–1856	608	90	186176 015 9
7	1857-1900	643	120	186176 016 7

The background to this great work, originally published between 1897 and 1903, is given in the June 1997 issue of the *Journal*. The volumes follow the same pattern; there are chapters on the Civil History (Admiralty, including ship design) and on the Military (operational) history of the RN, both written by Laird CLOWES himself or by Carr LAUGHTON, on Voyages and Discoveries by Sir C R MARKHAM together with lists of ships lost in the period and of flag officers promoted. There are a few supplementary passages such as that by Theodore ROOSEVELT on the war of 1812. The dates for the various sections do not always coincide accounting for the discrepancies in the table above. The review will outline the sailing ship era (Vols 2–5) briefly and concentrate on the last two volumes which are technically and politically more relevant to today's navy.

Volume 2 covers the period from George III to the Peace of Utrecht including the long Dutch wars. The navy and war at sea were both in their infancy; piracy, even in home waters was not uncommon. Ship design was a matter of judgement with mistakes corrected by ballast or girdling. Tactics, too, were primitive. Initially a gaggle, rather than a formed squadron, would group round flagship to begin the fight. It was the eventual success in this era which established the beginnings of British supremacy. There are many side issues in this volume—the establishment of Greenwich Hospital, the position of the Lord High Admiral, profanity in the Navy (!) etc.

Volume 3 takes the story on until the French Revolution. Wars were becoming world wide with actions off India and in North American waters. The main events include the disgraceful shooting of Admiral Byng, the capture of Quebec, dependent on British sea power American revolution and the generally unsatisfactory war associated with it. The younger officers learnt much from that war ensuring that the RN was supreme in fighting the Revolutionary and Napoleonic wars. Ships and their equipment improved greatly during the 18th century. Copper sheathing was tried in 1761 and, once some problems had been overcome, its use became general by about 1780 giving the RN a speed advantage in the next war of about 1½ knots. Pumps were much improved and Harrison's chronometer enabled ships to know where they were for the first time while the introduction of the carronade greatly increased fire power.

Volume 4 opens with an account of the minor operations from 1763–1792. It is one of the great advantages of a lengthy work that these minor operations can be described, giving a far better impression of the importance of sea power than a short book concentrating on the great battles. These great battles of the revolutionary war are covered in detail as are the great mutinies of Spithead and the Nore but there are many lesser battles—and mutinies—in this book. Trafalgar is the main feature of Volume 5 but the war was to last another 10 years with many lesser but still important actions worldwide. The tables of British and enemy losses make clear the great superiority of the RN in men and ships.

In the 19th Century, Europe and, to some extent, the rest of the world had a good deal in common with today's political scene. The chance of a major war involving the UK seemed remote yet the RN's margin of superiority was small, potentially hostile navies were strong and there were many areas of conflict and a considerable number of minor wars. Slavery was almost universal in the old world; in all countries and races. From the 19th Century onwards the British government took a series of actions banning slavery first in the UK and then the Empire. Positive action led to the RN being used to suppress the slave trade and throughout the 19th Century British warships were involved in this task at a very high cost in deaths from disease.

Volume 6 opens with Theodore ROOSEVELT's account of the war of 1812. The RN was overstretched and had become overconfident and much was learnt from the series of defeats with which this war opened. BROKE's defeat of the *Chesapeake* was due to good gunnery and was to bear fruit in gunnery training at *Excellent*.

The Civil History section is a great disappointment; the author's account of the introduction of steam, of the propeller and of iron hulls is wrong in almost every aspect. He follows the traditional view of a reactionary Admiralty, much at variance with modern views. This can be excused to some extent as official papers were not available and nor were most of the Brunel papers. Clowes is also incorrect in saying that *Inflexible* would sink if one end, outside the citadel, were flooded. A well qualified committee found that she would float—just—with **both** ends flooded.

The Crimean war is the main feature of the military section of this volume and here the author is at his best. It was then an unusual war involving major powers but fought for limited objectives. One may see parallels with Korea and Vietnam in this century. It has been well said that this war was the last old fashioned war for the army and the first modern war for the navy. By the end of the war the whole of the effective fleet was steam driven and propellers were universal in recent ships. Armour, shells, breech loading guns and mines had appeared and direction from afar by telegraph was in use.

Both the last 2 volumes recount stories of bravery in minor wars and skirmishes mostly very creditable to the bravery of the men of the Royal Navy. Nearly all these fights arose in the clash of cultures as the Empire expanded and one may well see them as misunderstandings rather than rampant imperialism; indeed government policy was firmly opposed to expansion.

This is an old fashioned history, strong on facts but with little analysis, particularly at strategic level—Why read it? The first reason is simple pride in one's service and particularly in the history of previous ships of the same name as that in which you serve. The RN is a human organization and not every thing is a matter for pride but one can even learn from the relatively few things which went wrong.

A very long history like this is necessary to give a balanced view; short histories will almost always concentrate on the great battles which form only a part of the influence of sea power on history. One can also learn lessons on the introduction of new technology (though not from this book); the introduction of steam followed by that of the screw may be compared with the introduction of Integrated Electric Propulsion today. The complete lack of subheadings in very long chapters makes it difficult to fund a particular topic and even, sometimes, where in the world we are.

LACROIX, E.; WELLS, L. *Japanese Cruisers of the Pacific War*. Chatham Publishing, London, 1997. 895 pages, 150 photographs, 300 drawings. ISBN 1 86176 058 2. Price £60

(reviewed by Eur Ing David K. Brown, RCNC)

This massive—nearly 3 Kg—book is a much expanded version of the articles by Dr Lacroix which appeared in the magazine *Warship International* between 1977 and 1984. It begins with a description of the cruisers of late World War I period which were generally similar to contemporary British ships. One may see 1920–21 as the real starting point when Fullmoto under the direction of Hiraga designed the small cruiser *Yubari*. They intended that she should carry a heavy armament at high speed on a small displacement. Both these naval architects were trained in the constructors' course at the RN College, Greenwich, both narrowly achieving a second class pass.

Yubari had many novel features aimed at saving weight but she completed 419 tons (14%) overweight, 11 inches deeper draught. The author has not been able to identify the cause of this growth—I would suggest wishful thinking on the part of inexperienced designers lacking much supervision and also lacking the advice of senior draughtsmen. The stability was thought satisfactory though 124 tons of ballast was added later after the *Tomozuru* capsized but the keel stresses were very high. The extra weight cost a little speed but she still made nearly 35 knots.

The next class were the two Furutaka, designed just before the Washington Treaty with six single 7.9 inch. They were described as 7,500 ton 'Normal' and declared under the Treaty as 7,100 Standard. In fact they were designed for about 8500 normal and completed at 9,500 tons. In itself this did not breach the Treaty which limited cruisers to 10,000 tons though the false claim of 7,100 was a breach. This characteristic of weight over-run was to follow in all later classes and will be explored in a later issue. The *Furutaka* was followed by two generally similar Kako class.

The book continues with the much bigger Myoko class (4 ships) with five twin 8 inch turrets and the Takao class (4 ships). For each class there are details of the machinery, armament, etc., with detail drawings of turrets, ammunition and other features. The drawings throughout the book are outstanding. There are outline sketches of preliminary designs, detailed drawings as completed and after major changes with inserts for lesser changes and differences within a class. Photography was discouraged and the authors have done a splendid job using British and American sources for many pre-war pictures and for wartime sinking shots. There is even a photo of *Asigara* sinking taken through the periscope of HMS *Trenchant*. A surprising number of wartime Japanese photographs have turned up though the quality is usually not high.

There are several chapters on the service careers of all these ships both before Pearl Harbour and in war. As the ships got older there were many refits both to fit new equipment and, more often to improve stability and strength. There were two disastrous storms which led to major changes. In the first of these, in 1934, the torpedo boat *Tomozuru* capsized off Nagasaki. The investigation which followed showed that the stability of most classes was inadequate and many ships were ballasted, bulged or even had armament and superstructures reduced. In a later gale in 1935 many ships suffered severe structural damage and several classes needed stiffening. At the 1937 Coronation Review Goodall noted in his diary that it looked as though *Asigara*'s riveted shear strakes had been added later—they had! The new *Mogami* class cruisers had to have most of their welded shell plating removed and replaced with riveted material.

The cruisers, particularly the big ones, played an important part in early Japanese successes but the price was high. Many capsized due to the centre line bulkhead extending through most of the machinery spaces. HIRAGA had fought hard against the heavy and almost unprotected torpedo armament; he was right, explosions contributed to several losses.

The big cruisers of the Mogami class completed with 15 6 inch guns on a displacement announced as 8,500 tons. They were actually designed for 9,500 tons, completed at 11,200 and went up to 12,400 by the time their strength and stability had been corrected. The two Tone class were redesigned by Fukuda (3rd class Greenwich), who replaced Fujimoto after *Tomozuru* capsized, to carry four twin 8 inch forward and up to 8 seaplanes aft. Wartime construction of the *Agano* and *Oyodo* classes were somewhat smaller ships. There are also training cruisers and two tiny ex Chinese ships.

Many of those who read the articles have been waiting anxiously for the book and copies are already very difficult to find. I am assured that further stocks are on the way. It is a splendid book and well worth hunting for. It is a very readable book though a bit heavy for comfortable browsing. It seems free of errors with one trivial exception which took me some time to resolve. Reference is frequently made to the 'Displacement—length ratio' in the context of resistance. I eventually found a definition in Appendix D as:

Displacement/(Length/100)²

In fact the exponent should read 3. Furthermore, other formulae on that page use L in metres; this one turns out to be feet. Displacement is in tons in place of the more usual cubic feet. I hope this note will save other reader's time.

Japanese cruisers were 'different' in many ways (mostly bad) and anyone interested in the history of warship design should study the reasons for these differences. There will be a critique of Japanese cruiser design in the next issue. Hiraga came to England in 1934 and met Stanley Goodall, the year above him at Greenwich. Goodall's diary records that Hiraga said that the Japanese organization does not allow designers to keep a grip of the job so that he could watch stability.

McLean, David; Preston, Anthony (Editors). *Warship 1997–1998*. Conway Maritime Press, 1997. 220 pages, 150 illustrations. ISBN 0-85177-722-8. Price £30.

(reviewed by Eur Ing David K. Brown RCNC).

It is correct but a little unkind to sum up this annual as 'the mixture as before' but I may be excused since the editors touch on this point in their introduction. *Warship* has been running for 20 years and has covered all the well known topics so it is inevitably going to more obscure items. Happily, the history of warship design in all countries still produces a rich harvest.

The first article by Colin Jones describes the world cruise of the RN's Flying Squadron in 1869–70 covering 53,000 miles in 17 months. It was a showing the flag exercise; cuts had reduced the strength of overseas squadrons and the flying squadron was to show that they could be reinforced quickly if needed. Admiral Phipps Hornby told his men on return that they were fortunate to have had this last major cruise under sail as the future lay with steam.

Two articles on RN cruisers are of special interest; the Leander and Sydney classes of the 30s by Keith McBride and wartime designs by George Moore. David Miller tells the somewhat shambolic story of the scuttling of surrendered U boats after World War II.

Other articles include—Kite Balloons in the USN, Unbuilt designs from Armstrong, the German Navy from World War I to Hitler, French cruisers of 1922, Canada's last carrier, German torpedo boats and the loss of *Tirade* and of *Curacoa*. Last but not (I hope) least comes your reviewer's short biography of the great designer, Sir Stanley GOODALL RCNC. The usual notes and reviews conclude yet another fine book.

MORRISS, Roger. *Cockburn and the British Navy in Transition*. University of Exeter Press, 1997. 352 pages, 9 illustrations, 11 maps. ISBN O 859989 526 2. Price £35.

(reviewed by Eur Ing David K. Brown, RCNC).

ADMIRAL COCKBURN has not generally been well treated by earlier writers and, in particular, SIR John BRIGGS' Naval Administration 1827–1892 is often quoted to portray Cockburn as a reactionary. This book is gradually being recognized as almost totally false. Cockburn was a Tory MP and, as such denigrated by the many Whig historians. Roger Morriss has done a splendid

job in describing the many services rendered by this great man to his country, the Royal Navy and, as First Naval Lord, to the advancement of technology.

COCKBURN's early career was even more exciting than that of the legendary HORNBLOWER. We read of his adventures as a dashing frigate captain in the Mediterranean, very much the protégé of Nelson. He took a prominent part in the ill fated Walcheren expedition of 1809. Then there is his secret mission to rescue the King of Spain from France—a rare failure.

In 1813 Cockburn commanded a squadron blockading the Chesapeake where he carried out a considerable number of combined operations against US government goods, destroying private property only when attacked. In early 1814 Cockburn came under the command of Cochrane and the pace of the war accelerated. In August Cockburn took part in the capture of Washington with troops under the command of General Ross. Cockburn is famed as 'The Man who Burnt the White House' though it was actually Ross who ordered the destruction of public buildings. (The author suggests that Cockburn wanted to burn the whole town). The later bombardment of Fort McHenry at Baltimore is said to have introduced the phrase 'The Rockets Red Glare' into the US National Anthem. He was knighted in 1815.

In June 1815 he was appointed Commander-in-Chief, Good Hope, and, as such, he had the task of taking Napoleon to St Helena in the *Northumberland* and guarding him until 1817. In 1818 he became MP for the traditional 'Naval' seat of Portsmouth but lost the seat in the general election of March 1820. He alleged there were irregularities and appealed but dropped the case later after he had been given a pocket borough seat. He had also become second Naval Lord in 1818. He was a strict disciplinarian but increasingly made it clear to officers that their duty was to prevent offences and that frequent or severe floggings would be taken to show that they had failed.

At the end of 1832 he was offered and accepted command of the North America and West Indies station. He went out in the frigate *Vernon*, the pride of the new Surveyor, Symonds, and Cockburn's mildly critical remarks on the failings of this ship were unwelcome.

He returned as First Naval Lord in 1841 in a time of great changes. Symonds' inadequacies were becoming apparent and Cockburn established various checks on the Surveyor which eventually led to his resignation. This same process led to a determined effort to improve the design of what would be the last sailing warships. The First Lord, Haddington, knew nothing of naval affairs and Cockburn had more power than usual. It is not clear that Cockburn was active in the development of screw propulsion, iron hulls or parallel improvements in guns but as professional head of the Admiralty he supported those making for change. He was a sick man when he left in 1846, suffered a slight stroke in 1848 and died in 1853.

This is a most enjoyable book and can be read as a thriller, as a carefully researched history or, preferably, as both. Readers who enjoyed Roger Morriss' earlier book on dockyards in the Napoleonic War will not be disappointed.

Myall, Eric. *The Hoverfly File*. Air Britain Publications 1997. 104 pages, 121 photographs (5 colour), Line drawings and 2 pages of full colour graphics. ISBN 0 85130 262 9. Price £19.50.

(reviewed by Lieutenant Commander J.S. Shears RN Ret'd)

It can not be said that this is an easy read as the book is full of detailed facts which tend to disrupt the flow of the text. For instance just as the reader is in the description of the training programme, a list of aircraft serial numbers and aircrew names will appear, which unless you are a researcher can distract the average reader. At one stage we are told that KK979 was not repaired

until March 1945, which was a surprise as we had not been told when it got damaged! But having been worried by this fact and thinking that he had missed something, this reviewer then turned to the end of the book where there is a detailed history of all the aircraft, and discovered that it was not involved in an accident but had only gone unserviceable. Also not knowing the history of the aircraft it is only on page 27, that the reader discovers the name Hoverely refers to both the R-4B and R-6A.

Despite the minor criticism above, this book is thoroughly recommended as it describes the history of the first operational helicopter and the most important forerunner of all modern helicopters. The author describes the history and build up of the aircraft's development and production. It might come as a surprise, to some readers, to learn that the aircraft was in production during the second World War. Initially the RN was very keen to develop the aircraft for convoy protection. The first two aircraft were to be delivered to the UK in January 1944 and during the Atlantic crossing, trials were undertaken from the MV *Daghestan*. When disembarked, the aircraft then completed the first helicopter cross country flight in the UK. In March to May 1944 the initial course for potential instructors was completed in the USA and this included 6 RN pilots. The first significant delivery of aircraft (crated) occurred in August 1944. In January 1945 a number of aircraft were shipped across in HMS *Thane*. After an uneventful crossing, *Thane* was torpedoed on the 15 January and although she was towed into the Clyde, she was so badly damaged she never sailed again.

The war was now at an end and the Navy's initial enthusiasm waned slightly. Two Flights were initially formed, one at HMS *Excellent*, operating from a canvas hangar near the swimming pool and another in the Orkneys. In March 1945, one of the Orkney based aircraft ditched in Scapa Flow and had the honour of becoming the first operational accident. In 1946 these flight were absorbed into 771 squadron, but one aircraft was to remain permanently with 703. In May 1947 the Admiralty decided to cease having flights within squadrons and formed the first all helicopter squadron, 705. It is interesting to note that the first Commanding Officer was Lieutenant Reed, the only CO at that time that was not a Lieutenant Commander. This might indicate how the Admiralty felt about helicopters.

In July 1948 there was the first fatality when an aircraft suffered a wire strike when operating out of Kingswear. As the aircraft became older, the spares became scarce (what's new?) and by August 1948, out of the twelve aircraft on 705 only one was serviceable. By October three airframes were reduced to spares and the last Hoverfly flight in the RN was undertaken in November 1950.

As mentioned earlier, this aircraft was the forerunner of modern helicopters and the trials that were undertaken are very impressive. Knowing the trouble the Americans had with using helicopters for minesweeping, it is surprising to find that, in March 1945, trials were undertaken in minesweeping in a slightly under powered aircraft! Also having been recovered from the sea in a SAR mission, how about sitting in your own seat attached to the outside of the aircraft! (The first SAR mission was carried out by a UK Hoverfly on 4 May 1946, when two small boys were rescued from a drifting dinghy off Thorney Island, by the RAF Air-Sea Warfare Development Unit.) In September 1946, KK 992 piloted by a Lieutenant A. Bristow, conducted a series of trials with the destroyer HMS Helmsdale. These trials were the first of 'small ship operations' and undoubtedly led to the way we operate helicopters in the Fleet today.

There are many good photographs through out the book and it is difficult to pick out ones in particular; but the SAR trial on page 52 makes one's eyes water and on page 48, why couldn't the pilot land to pick up that message?

The book is thoroughly recommended and should be on the bookshelf of anyone interested in the development of the helicopter and the Fleet Air Arm.

ROBERTS, John. *Battlecruisers*. Chatham Publishing, London, 1997. 128 pages, 100 photographs and drawings plus fold out plan. ISBN 1 86176 006 X, Price £30.

(reviewed by Eur Ing David K. Brown RCNC).

This is the second in Chatham's 'ShipShape' series. After an introduction there is a chapter dealing with origins in the older style of big cruiser. There are then two chapters dealing chronologically with the background and staff requirements for each class up to the *Hood* (including *Renown*, *Glorious* etc.). These two chapters show how much the battlecruiser was Fisher's brain child; there were very few built when he was not in authority. The stated roles were scouting, destruction of enemy cruisers and support to the battle-line but Fisher increasingly saw them as replacing the battleship, a view for which he won little support.

The book continues with chapters on machinery, armament and armour before a lengthy concluding chapter. The modern designer working to defend unarmoured ships against powerful missiles will have more sympathy for the lightly armoured battlecruiser than they have received in the years since three were lost at Jutland and the *Hood* in the later war. The Jutland losses are considered in some detail and the principal blame is laid on British cordite which exploded when exposed to a bursting shell whereas German propellant would burn under similar conditions. There was a considerable quantity of cordite in the magazines of British ships which was past its 'best by' date and may have deteriorated.

The battlecruiser was really made possible by the steam turbine which not only was lighter and more compact than the triple expansion engine but was capable of sustained high power, largely because of the much reduced vibration. Unfortunately, the British ships were burdened with large tube boilers which were much heavier than the German small tube boilers and required a great deal more space.

FISHER's greatest error was in not thinking what would happen when his battle cruisers were faced by similar—or better—enemy ships. However, the RN saw the battlecruiser as having a future and the first post war capital ships would have been battlecruisers. (Note that the later *Vanguard* was originally described as a battlecruiser).

The book is well illustrated and the author has done a fine job in locating photographs which are not too well known. There are a number of plans and cut away drawings of a twin 12 inch gun turret and the bridge of the *Queen Mary*. There is a large scale plan of this ship including—profile, upper deck plan, sections and lines.

This is by far the most complete account of these fascinating ships and it is very readable. It seems rather expensive but the enthusiast will think it worth every penny.

RODGER, N.A.M. *The Safeguard of the Sea, Volume I 660–1649*. Harper Collins, London, 1997. 719 pages, 63 Illustrations, 20 maps, ISBN 0 00 255128 4, Price £25.

(reviewed by Eur Ing David K. Brown, RCNC)

This splendid book is, as the author says 'the first fruit of a generous act of joint patronage by the National Maritime Museum, the Society for Nautical Research and the Navy Records Society which together decided to apply a legacy from that eminent maritime historian, the late DR R.C. Anderson, 'to

support the writing of a new naval history of Britain'. Several other societies contributed to the cost of the specially drawn maps which are an outstanding feature of the book. (Too many books have maps which fail to show many of the places named in the text; a fault which does not apply to this book). Dr Rodger is the Anderson Fellow of the Maritime Museum and is well known as a naval historian not only for the academic standards of his work but also for their very readable style.

Most chapters have a subtitle which gives some idea of the breakdown of this lengthy book; after three introductory chapters, there are:

- 14 devoted to Operations
- 6 to Administration
- 4 to Ships
- 4 to Social Life
- 1 to Conclusions.

This is much more than a history of Britain's Royal Navy: as DR Rodger points out for much of the period covered by this volume there was no Royal Navy, ships owned or requisitioned by the Crown might be used for trade or even piracy for much of their life. Also, for much of this period there were at least four nations in these isles and even some of the outlying parts of these were semi-independent. The background of economic, social and political problems in Western Europe is extremely well covered—one distinguished reader said that it was the best account of King Harold's campaign from Stamford Bridge to Hastings that he had read.

The author is not frightened to demolish old myths; for example he treats many Elizabethan heroes as pirates rather than privateers fighting only the Queen's enemies. The love of plunder was to be a major cause of the ill discipline which was to plague the Fleet for so long. Dr Rodger is kinder in dealing with corruption. Senior officials had very low salaries—which were often not paid at all—and it was expected that their income should come from reasonable profit on their operations, often by selling licences. Any one seeking to challenge the views expressed will have a lot of reading to do. The bibliography alone runs to 50 pages and there are 90 pages of references.

The sub-title is 'a naval history of Britain' which sums up the book very well. When England, Scotland or, later Britain, had power at sea it could not be invaded and could influence the coastal regions of Western Europe and even Algeria. When our sea power faltered it was English towns which were burnt—a far more frequent occurrence than heroic histories like to mention.

It is hard to give the flavour of this massive—and very readable—book in a fairly short review. I will just pick out a few of the items which caught my eye; dead reckoning navigation was described as 'de fantasia' in Castile. The shock when the British met off Brest in 1512 galleys which mounted guns capable of sinking ships. (Possibly the sinking of *Sheffield* by Exocet is the modern equivalent). The author's view on Elizabethan warship design are very interesting, starting with the eternal problem of balancing the conflicting requirements of the ship. He shows that few, if any, novelties were due to English designers but, coming late to the game, we were able to pick up and improve the best features from elsewhere.

There are several passages dealing with the 'ethics' of corruption and piracy. It is suggested the Henry VIII's claim to be the founder of the Royal Navy rests most securely on the permanent administrative base which he established. A recurring theme is that sea power is more than ships and sailors

and cannot be improvised. The illustrations are well selected and properly reproduced.

Finally, one must consider the differences between this book and Laird Clowes' history, written 100 years ago and recently re-published (and reviewed here). The older book tells us **what** happened in great detail, every ship is named with the number of guns carried. Rodger tells us **why** it happened, with a full background from politics to ship design and financial interest. Both are fascinating and readable and if your bookshelf is big enough you should have both. Rodger's book is remarkably cheap by current standards but don't forget there are two more volumes to come, I look forward to reading them.

ROYLE, Trevor. *The Best Years of Their Lives. The National Service Experience 1945–1963*. John Murray (Publishers) Ltd. 1997. 288 pages. 34 photographs. ISBN 0 7195 5688 0. Price £13.99. (reviewed by Lieutenant Commander J.S. Shears RN Ret'd)

This is the paperback edition of the book that was first published in 1986. The author has compiled a very readable social history of this period. He has interviewed and recorded the impressions and anecdotes of a wide cross section of those who were experiencing the 'best years of their lives'. Anyone who has served at any time in the armed forces will recognize and maybe, cringe at some of the stories!

The author commences with a brief history of conscription. He reminds the reader of how over the centuries there had been a widespread distrust of standing armies and how for centuries the defence of the country was delegated to the Navy. During times of crisis, armies were got together by conscription. Over the years the professional serviceman emerged, but three times this century in 1916, 1939, and 1947 this country needed National Service. The book obviously is biased towards the Army as they recruited the greatest number. The Navy were able to select their recruits from those who had been in the Sea cadets etc. and so the National Service experience was not such a culture shock.

At the start of the period covered, the induction into the services was in some cases brutal and not undertaken in the most cost effective and intelligent manner. If a man had gained civilian qualifications prior to call up, in most cases this was not taken into account. Bullying appeared common, but it did engender a team spirit amongst the recruits as they took on the establishment. Despite this, many National Servicemen look back on their time with fondness, as in some regiments they did become fully integrated and felt they were part of the team.

The Army was affected by the low education standard of the recruits. This low standard was due to the disturbance of education during the war years and the reforms that were put in place in the 40's took time to come through. Also during the war equipment had become more complicated and at the end skilled men had been demobbed en masse and this had left a large void. To fill this gap, the Army had to redesign their training methods and make better use of the recruits.

The author covers all aspects of life as a National Serviceman It should not be forgotten that a great number of these men went to war in Korea, Malaya, Kenya etc. and were killed or seriously wounded. Anyone who has been through a training establishment will recognize those absurd charges. In this book the reviewer had to chuckle over those RAF recruits caught pressing their trousers under the mattress and charged with 'Being idle while asleep.' Also when discussing swearing, this reviewer will never think of Chester Cathedral again in the same light!

Thoroughly recommended read, which should bring back both happy and sad memories to both the National Serviceman and anyone who has served in one of the Services.

STURTIVANT, Ray; BURDEN, Rod. *Royal Navy Instructional Airframes*. Air-Britain Publication 1997. 128 pages. 74 photographs. ISBN 0 85130 263 7. Price £17.50.

(reviewed by Lieutenant Commander J.S. Shears RN Ret'd)

This is the updated and second edition of the original monograph first published in 1978. As can be expected of such a reference book, a great deal of research has been undertaken to produce such a detailed document. The detail listed on some of the airframes is quite surprising, for instance what happened to the Prototype Scimitar? I am sure it will surprise many to discover that it was only scrapped in 1991, when the fuselage and rear end went to Mayer and Perry Scrapyard at Snailwell, Cambridgeshire. But you can still see the nose section as it went to the Vampire Collection at Ruislip, and is presently on loan to the Brooklands Museum.

You do not have to have an anorak to enjoy delving into this book, and I suspect many readers will be surprised at how many aircraft Serial Numbers ring a bell and will be able to find out what did happen to that old ***** scrap of metal.

Obviously a very specialised book, which is a must for the true researcher and enthusiast, but also recommended for those who have an interest in the Fleet Air Arm.

WINFIELD, R. *The 50-Gun Ship*. Chatham Publishing, London, 1997. 128 pages, 104 plans and photographs. ISBN 1 86176 025 6. Price £30. (reviewed by Eur Ing David K. Brown, RCNC)

This book deals with the development of the 50 gun two decker from 1635 to about 1790. The first 68 pages describe the development of the category and its role. In modern terms it was a general purpose ship which illustrates the eternal debate of quality versus quantity and they tended to fall between two stools, not powerful enough to take on a full battleship and a bit slow in chasing a frigate. However, to obtain the numbers needed compromise was essential.

Very full details of builder and key dates, of dimensions, not only of the ship but of masts and yards, guns etc are provided. In all there are 126 tables.

The latter half of the book takes in turn topics such as:

- Arrangement
- Accommodation
- Rigging
- Fittings
- Armament
- Stores
- Cost
- The way in which they were deployed.

Most of the illustrations are copies of original plans and photos of contemporary models. Good use is made of paintings and drawings by the Van de Veldes, father and son. They are two exceptionally fine cut away drawings of the *Leopard* (1790) and a large set of plans of the same ship can be found in a pocket at the back of the book, all by John McKay. *Leopard* will be familiar to readers of Patrick O'BRIAN.

The book is well produced and easy to read and is recommended to sailing ship enthusiasts. I would quibble with the emphasis the author places on the ratio of keel length to beam as the key factor in speed. The differences are too small to be significant.

WYNN, K. *U-Boat Operations of the Second World War, Volume 1, U1-510*. Chatham Publishing, London, 1967, 368 pages, 9 maps. ISBN 1 86176 024 8. Price £30.

(reviewed by Eur Ing David K. Brown, RCNC)

This book contains short but very detailed service histories of U1-U510 (later U-Boats will be covered in a second volume). The style is straightforward and will be illustrated by outlining the treatment of U440:

The section begins by listing her as a Type VIIc (It would have been useful to have had tabulated particulars of each type of U-Boat) followed by dates of laying down, launch and commissioning. Her field post office number is also given as are the numbers of the two flotillas in which she served. Her two captains are named and it is recorded that she undertook five patrols without sinking a ship.

The five patrols are then described in some detail—U440, a fairly undistinguished boat is given nearly the whole of a large page. The entry concludes with her sinking by a Sunderland flying boat on 31 May 1943 with the loss of all 46 men.

The nine appendices consist of cross references to Commanding Officers, Post Office numbers, groups, Allied warships and merchant ships attacked, sunk or mentioned in the text. These indexes are very useful and a few spot checks supported their accuracy.