

BOOK REVIEWS

CLOWES, W Laird. *The Royal Navy — A history from the earliest times to 1900 (Vol 1)*. Chatham Publishing, London, 1996. 722 pages, 100 illustrations. ISBN 1 86176 010 8. Price £18.

(reviewed by EUR ING David K. BROWN RCNC)

Laird CLOWES' history was originally published in seven volumes between 1897 and 1903 and is now appearing in a paper back facsimile edition. He was assisted by a very distinguished group of co-authors — MAHAN, MARKHAM, WILSON and Theodore ROOSEVELT. Much of the original introduction was devoted to deploring the paucity and quality of overall naval history in the United Kingdom. That his work is worth re-printing and reading 100 years later shows how little has changed and how little it is recognized that Britain's prosperity was based on sea power.

Volume 1 takes the story from near legendary early times to the Spanish Armada in comprehensive and very readable style. Clearly, there are many specific topics which have been overtaken by later research and by the recovery of vessels such as the Bremen cog, *Vasa*, *Mary Rose* etc. However, there is no alternative currently available which follows the complete sweep of history. References are comprehensive so that serious students can decide if the passage remains acceptable while the less serious can enjoy the story which is basically sound.

The great war with Spain is covered at length with preliminaries, the raid on Cadiz, the planning of the Armada and its fate. The story is largely told by lengthy quotations from contemporary writers, Spanish as well as British. Voyages of exploration are described by Sir Clements MARKHAM. The illustrations are mainly well known and have reproduced fairly well.

CULL, Brian with NICOLLE David and ALONI Shlomo. *Wings over Suez*. Grub Street Publishers. 385 pages, 186 photographs, 1 Map. ISBN 1-898697-48-6 Price £27.95.

(reviewed by Graham HODDINOTT)

Wings over Suez is a book of two parts. The first part is an account of the air conflict between the Israelis and their Arab neighbours during the years 1949 to 1956, and the race to improve and expand their respective air forces during this period. For the reader it provides a background history, and a feel for the Egyptian attitude towards the British presence. It described the overthrow of the Monarchy, the rise of President Nasser, the build up of the Egyptian Air Force by purchasing Soviet aircraft, having been refused by the West, and hence an understanding of why the British were very reluctant to leave Egypt.

The second part of the book provides the first comprehensive account of the Anglo-French air assault on Egyptian military targets, and the subsequent air/sea invasion of Egyptian territory. The reader is led into this phase by the secret meeting, and subsequent secret Treaty of Sevres, made between Israel and Egypt, resulting from that Treaty, commencing 29 October 1956, and thence the Anglo-French assault, Operation Musketeer, commencing 31 October 1956.

The book is researched in great detail, has many contributions made by pilots from all of the participating air forces, and illustrated with an abundance of photographs, many previously unpublished. There are informative footnotes, and the communiqués from Russia and the USA indicate the political pressure brought to bear on Britain and France.

Wings over Suez is a detailed, accurately researched, and the only account of this Anglo-French-Israeli intrigue against Egypt. Although Egypt's Armed Forces were defeated, Egypt emerged politically as the victor. The USA failed to follow up on goodwill gained by the tough stance taken against Britain and France, which resulted in the Soviet Union becoming Egypt's major arms supplier. Nasser consolidated control over the canal, and nationalized most British and French property and companies. In March 1957 the first shipment of the Soviet re-supply programme for the Egyptian Armed Forces arrived.

To make a small criticism the fact that the chapter on the Anglo-French build up comes in between the account of the Israeli operation in Sinai and Operation Musketeer tends to disrupt the readers concentration on battle events, especially as the two actions are part and parcel of the same event. Maybe an extra map or two would not go amiss either.

A balanced account of a brief war the story of which needed to be told.

GORDON, Andrew. *The Rules of the Game, Jutland and British Naval Command*. John Murray, London, 1996. 720 pages, 40 illustrations. ISBN 071955076 9. Price £30.

(reviewed by EUR ING David K. BROWN, RCNC)

This important book examines command and control in the Royal Navy before and during World War I, taking Jutland as a case study. After some introductory remarks the author moves quickly to the preliminaries to Jutland and the struggle between JELlicoe and BEATTY for control of the QUEEN ELIZABETH class of battleships, EVAN THOMAS' 5th battle squadron. They were temporarily attached to BEATTY whilst his 3rd battlecruiser squadron was detached to Scapa for long overdue gunnery practice.

EVAN THOMAS joined BEATTY in the Firth of Forth eight days before the fleet sailed for Jutland but, though they were only a few hundred yards apart, the two admirals did not meet and BEATTY did not even send a copy of the Battle Cruiser Fleet orders which differed significantly from the Grand Fleet orders that EVAN THOMAS was used to. Prior to the first encounter, EVAN THOMAS' powerful ships were positioned 5 miles from BEATTY in the opposite direction to that from which an enemy might appear. When contact was made, BEATTY's signal was not seen by EVAN THOMAS who continued for some time to steam away from the battle. Later, when the High Seas Fleet was sighted, there was another signalling failure on BEATTY's flag bridge which exposed EVAN THOMAS' ships to unnecessary danger. These failures were due directly to the flag lieutenant but he had failed in earlier actions and BEATTY should have replaced him.

The author suggests that EVAN THOMAS was partly to blame for not using initiative and closing BEATTY without signal. While there is a grain of truth in this, it was BEATTY's failure to meet EVAN THOMAS before sailing which was to blame.

The narrative then leaves Jutland for the central theme of the book. During the century without a major naval battle the Navy had become dominated by the Signal Book which led to excessive centralized control by the C-in-C. Junior admirals expected to ask permission or, worse, wait for instruction before taking the slightest action. The first major attempt to break this system was by Admiral TRYON who exercised his fleet in 'follow me' manoeuvring. Unfortunately, TRYON was killed when his flagship collided with that of his second in command apparently due to confusion between radius and diameter of turn. Ironically, TRYON had his fleet under central control at the time. His replacement was chosen to restore orthodoxy and it appears that most of the British admirals at Jutland were brought up under this regime.

GORDON then shows that many of these officers were freemasons, members of the Royal Geographical Society and had contacts with younger members of the Royal Family. He quotes DIXON's *Psychology of Military Incompetence* showing that the way to flag rank was by the 'authoritative' route in which those of defective personality would revel in formality, ceremony, worship seniority and expect to be told what to do at all times. The alternative personality, the 'autocrat', given to lateral thinking and the use of initiative had little place in this navy.

The story returns to Jutland, and good use is made of the determination of the exact positions of the wrecks of *Invincible* and *Queen Mary* to revise track charts and hence timing. During the run to the north BEATTY, EVAN THOMAS and their subordinates failed utterly to keep JELlicOE informed of the position and course of the High Seas Fleet. GOODENOUGH was a partial exception but his positions were so inaccurate that they did not help. It is amazing that both HIPPER and SCHEER followed BEATTY on a northerly course, thinking he was running away, when it should have been obvious that he was joining JELlicOE. GORDON suggests that JELlicOE should have deployed into single line much earlier but it would not have been easy to get such a clumsy line into the right position to engage an enemy whose course was unknown.

Like others before him, GORDON criticises JELlicOE's decision to turn away from the German torpedo attack at SCHEER's second turn away. With hindsight, this criticism is probably correct but at the time JELlicOE was expecting a much bigger attack and it was not then known that the bubble wake from German torpedoes was easily visible. There was a general tendency, not only in the RN, to over-rate the threat from torpedoes. Jellicoe is also criticized for keeping a single line rather than allowing squadrons and divisions to manoeuvre independently. While he may have over centralized, it must be remembered that the only hope of a German victory was if they could concentrate against a part of the Grand Fleet. The RN's determination to fight concentrated was not pure 'authoritarianism' but was based on pre war exercises, notably under Sir William MAY, which showed the danger of divided action.

The book closes with with an account of the disgraceful post war battles over the history with BEATTY in particular attempting to falsify the records.

Personal Note

In the review above I have tried to outline Andrew GORDON's views in an impartial fashion but feel bound to append a more personal note on this fascinating book. I would see this as a special example of the general rule that, in all services, in all nations, peace time leaders rarely succeed in war — Andrew CUNNINGHAM as a rare exception. Gordon is clearly right in his central theme of lack of initiative, even at quite high level. There are far too many well documented stories from Jutland of captains failing to open fire or even to report an enemy sighting, seeing this as the admiral's job.

The one area in which I would disagree is in the capability of BEATTY. There are two types of rebel against a conventional hierarchy, those who want more initiative and those who are too idle to live up to primary standards. In my view, BEATTY's signalling failures in earlier battles, his failure to meet EVAN THOMAS before the battle, further signalling failures and his neglect to keep JELlicOE informed suggest that his rebellion was from incompetence and this is supported by his post war attempts to alter the record. I hasten to add that I am not pro Jellicoe though he did reach bare competence.

I am also concerned by the difference between GORDON's account and that of LAYMAN (review below) on the attitude of JELlicOE, BEATTY and others to

naval aviation. It is possible that they were conventional and formal in their main business, the clash of battle lines, while acting in more progressive style on the more peripheral subject of aviation. There are many sub plots in this lengthy book which cannot be dealt with in this over—long review.

It is indeed an important book and should be studied by everyone concerned with the future navy. It is a long while since the RN fought a major war at sea and it is right that every officer should examine his conscience and attitude to 'authority'.

HALE, Martin. *Miles M33 Monitor — Royal Navy Target Tug* 24 pages, 8 photographs, 8 illustrations. Price £5.75 direct from:

25 Cromwell Road
Parkstone
Poole
Dorset

(reviewed by John SHEARS)

This monograph records the history of one of the less well known aircraft flown by the FAA. The idea for a Target Tug was first conceived during the summer of 1940, with the provisional specification being issued in May 1943. The original production orders totalled 500 aircraft for both the RN and RAF, with the manufacturer being advised to prepare for a production run of 2,000. For various reasons, described in detail, only 20 production aircraft were finally built. The author describes its failure to:

“The MONITOR story is one of official indecision, broken promises, unwillingness to listen to advice, leading to an inevitable waste of public resources — *Plus ca change!*”

A very good read, which is thoroughly recommended.

HAYWOOD, Roger. *The Fleet Air Arm in Camera 1912–1996*. Sutton Publishing Ltd 183 pages, 240 Black and White photographs. ISBN 0 7509 12343 5 Price £18.99

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

This book was published at the same time as *HM Submarines in Camera* and unfortunately it comes a poor second. One is always a bit suspicious of a book when the author has to explain in the introduction that it is not intended to be a comprehensive illustrated history, but the photographs have been selected to give a taste of the vast range of material available. As a catalogue that is fine, but what the book lacks is an introduction to each chapter giving a brief history of what that section is trying to illustrate. The explanations under each photograph are sometimes very frustrating as they leave the reader wanting to know more. Over the years the FAA photographic sections have produced some marvellous results. It is a pity that the latest photographs in the book, taken with modern equipment, are so poor.

There is no doubt that there are some very interesting photographs, but one cannot help but feel that it could have been so much better.

JACKSON, Robert. *Suez The Forgotten Invasion*. Airlife, Shrewsbury, 1996. 153 pages, 30 photographs, 5 maps. ISBN 1 85310 7743 Price £12.95 (Paperback)

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

Though there have been many books on the politics of the Suez operation, there has been little on the military aspects. This excellent little book gives a very clear outline of the successes and failures of that operation. Political

manoeuvring meant that there was no chance of surprise but, on the other hand, there was no pre-emptive strike on the Anglo-French force.

Substantial numbers of French and British aircraft were used to destroy the Egyptian aircraft — generally more modern — on the ground. Bombing attacks on runways were ineffective but allied fighter bombers were very successful. Landings were spear-headed by a parachute drop and followed by helicopter landings. The latter despite the capacity of the small helicopters available (3 men) were very successful and an omen for the future.

The landing area was cleared quickly and the main force, with tanks cleared the towns of Port Said and Port Fuad and began to press down the canal before being stopped by the cease fire. We learnt that the use of force in limited operations was to be a feature of modern life which could not be solved by nuclear weapons. Amphibious and airborne operations regained importance. The brief quarrel with the USA was soon cured — at least in military areas.

The photos are clear and well reproduced showing the difficulty in hitting airfield runways. The maps are excellent.

LAYMAN, R.D.. *Naval Aviation in the First World War*. Chatham Publishing, London, 1996. 224 pages, 39 illustrations. ISBN 1 86176 007 8. Price £22.50.

(reviewed by EUR ING David K. BROWN RCNC)

This is one of the first wave of books from Chatham Publishing and it is a good start. The author, well known as one of the foremost naval aviation historians, describes his book as 'philosophical', omitting technical detail. He maintains that the contribution of aviation to naval operations in World War I has been underrated and, in the case of Britain, there is a specific reason for this. As a matter of policy, it was decided that all aviation history should be in the RAF's official history and, as a result, there is little mention of the air in the naval history. Though the RAF history devotes considerable space to maritime operations, the authors were not inclined to credit the Admiralty for their success.

In particular, the author debunks the myth of the battleship admiral, believing that the big gun would settle everything and that aviation was an unimportant distraction. On the contrary, most admirals were enthusiastic supporters of aviation, sometimes to a fault in expecting too much from these flimsy and unreliable flying machines.

Consideration is given to the use of naval aircraft in combat, in tactical and strategic attack in reconnaissance and, particularly in antisubmarine operations. It seems fairly clear that the RNAS was the leader in strategic bombing though their attacks were mainly shore based until the first real aircraft carrier, *Argus*, commissioned just before the Armistice. One may see the attack on the airship bases at Friedrichshafen on 21 November 1914 and Cuxhaven the following month in this light. The big bombers which were just becoming operational at the end of the war were ordered by the RNAS. On the other side, the airship raids on England were initiated by the German Navy. The use of aircraft by German raiders is covered as are operations such as the Dardanelles and the destruction of the *Konigsberg*.

The book covers aviation in all navies though the Royal Navy had by far the biggest force. At the end of the RNAS, it operated some 3,000 heavier than air craft, 111 airships and about 200 balloons with 55,000 men. The USN was about two-thirds that size, France and Germany about half whilst Russia and Italy had substantial forces.

The illustrations are well chosen from a wide range of nations and most are new to this reviewer.

There is an apparent conflict between the narrow minded and reactionary admirals portrayed by GORDON (*Rules of the Game*, reviewed here) and the enthusiasm for air power displayed by the same men. It is possible that admirals would welcome a new tool - aircraft - which could improve their chance of winning the big gun battle whilst at the same time could be very conservative in the procedures by which they would fight that battle. Certainly, these two books should be read together - and then reread.

LURAGHI, Raimondo. *A History of the Confederate Navy*. Chatham Publishing, London, 1996. 535 pages, 21 illustrations, 14 maps. ISBN 1 86176 021 3. Price £30.00.

(reviewed by EUR ING David K. BROWN RCNC)

The hero of this detailed account is undoubtedly William MALLORY, Confederate Secretary of the Navy, who had a vision of winning command of the sea by using advanced technology such as armoured ships and powerful breech loading guns. Much of the book describes the problems of implementing this vision in a Confederacy with inadequate supplies of iron, little industry, poor communications and lacking in industrial management skills.

Imaginative design and improvisation overcame some of these problems and led to the construction of a number of powerful ironclads of which several had to be destroyed before completion to prevent capture by advancing Union forces. The Confederacy carried out the first successful attack by a submarine and built some ingenious torpedo boats. All this came against a background of chaos; since iron was scarce, armour was rolled from railway lines and there were cases in which a railway line ripped up for its iron was found to be an essential link. There were other cases in which essential items were thrown off trains by local 'war lords' to make way for less important goods.

The numerous actions are clearly described, helped by the excellent maps which emphasize the importance of the few railways then operating. The illustrations are poorly reproduced and most are well known.

This book was originally published in Italian and has been translated. This may account for lack of clarity in some of the more technical passages some of which are almost incomprehensible e.g. the variation of the specific gravity of iron with carbon content.

The American Civil War was only the second to involve novel technologies in naval warfare such as armour, breech loading guns etc. and is an interesting case study of the influence of technology. This book, written from the Confederate viewpoint, is an important addition to the literature.

LYON, David. *The First Destroyers*. Chatham Publishing, London, 1996. 128 pages, 55 photos, 39 plans and many sketches. ISBN 1 87176 005 1. Price £30.

(reviewed by EUR ING David K. BROWN, RCNC)

In the light of their importance to the development of the modern navy, it is surprising how badly served is the story of the early destroyers. The only reliable, if brief, account is that by the present author in Conway's *All the World's Fighting Ships 1860-1905* — and the new book tells us that even that has had to be revised.

The book starts with a lengthy introduction describing the way in which the torpedo boat destroyer was conceived as a counter to the torpedo boat in discussions between the Controller (ADMIRAL FISHER) and the shipbuilders Yarrow and Thornycroft. (For no clear reason, the contribution of the latter is often omitted). The programme of orders is then outlined, year by year up to 1908-09. (Excluding the RIVERS which, it is promised, will be the subject of a later book).

In part II, individual builders are considered in turn with detailed descriptions of the ships which they designed and built. In all cases, the Admiralty issued a very short statement of requirements and the builder submitted his own design — and price — for tender. There were penalties for failing to reach the contract speed. Speed was measured on the measured mile in very artificial conditions, often including far more numerous stokers than could be accommodated in service and the service speed was some 2–3 knots less and further reduced in other than a dead calm. It is interesting that the policy of design by the builder was soon largely abandoned in favour of in house design.

Part III concerns the ships in service and is sub-titled 'Detail and fittings'. Much of this section deals with the appalling living conditions in these early boats though there is plenty of evidence that these conditions were willingly accepted both by officers and men in return for the freedom and excitement of the life and the small, extra pay known as 'hard lying allowance'.

Part IV gives a brief comparison with foreign ships; as the author says, the RN had the advantage of being first with orders, first with ships in service and built by far the largest number.

The illustrations are a most important feature of the book and help to justify the rather high price of a slim book. The photographs are well chosen, not too well known and clearly reproduced. There are 37 reproductions of plans from the National Maritime Museum where David LYON was curator of the plans collection for many years. These are mainly 'As Fitted' general arrangements but there are a few structural drawings which show how flimsy these ships were. In addition there is a redrawn set of plans of *Velox* (Ideal for model makers) and a set of cut away drawings of *Havock*, both by John ROBERTS. In addition, there are a large number of sketches from the Perkins collection showing how the appearance of these ships changed over the years.

It cannot be claimed that this review is totally impartial since I have been discussing destroyers with David LYON for half a lifetime and am greatly flattered by his comments on some of my own work.

This is apparently the first of a series of books from Chatham under the general heading of 'ShipShape'. It is an excellent start and should be studied by every student of warship history. We may look forward to its successor on the RIVER class and would greatly welcome a similar work on torpedo boats.

MCLEAN, David; PRESTON, Anthony. (Editors). *Warship 1996*. Conway Maritime Press, 1996. 224 pages, 138 illustrations. ISBN 085177685X. Price £26.

(reviewed by EUR ING David K. BROWN RCNC)

A year ago there was a total change in the management of Conway Maritime Press and this has led to a new editor, David McLEAN, and the return of *Warship's* very first editor, Anthony PRESTON. This change has had very little effect on *Warship 1996* which is very much the successful mixture as before; perhaps not surprising since most articles must have been drafted before the changes took place.

Starting with articles on the RN, there is another fine article by John BROOKS on Percy SCOTT and the director, largely demolishing claims of reaction and obstruction but, if anything, enhancing one's regard for SCOTT's own work. George MOORE gives an insight into the difficulties of the RN's cruiser programme in World War II, difficulties which, it may be thought, were largely due to lack of a clear view of the role of the cruiser. There is an article on the loss of the *Queen Mary* at Jutland based almost entirely on eye-witness accounts but coming to no firm conclusion. Your reviewer's own

article on the lessons of the Russo-Japanese War has been reprinted in this *Journal*. A very detailed article on E boat operations in the Channel forms an interesting contrast to the book *E Boat Alert* reviewed below. The article shows the difficulties of anti E boat work showing that the Lyme Bay tragedy was not an isolated disaster but was almost inevitable.

Foreign navies are well represented with articles on:

- French cruiser *Emile Bertin*
- Swedish coastal defence ships
- German minesweepers of World War II
- A very well researched article on Chinese cruisers of the 1880s.

Operationally, there is an article on the last voyage of the Japanese submarine I-52 which set out for Germany in 1944 and failed to arrive. In 1865 the British and French navies held exchange visits and learnt a lot about each other and their ships. The book concludes with the usual book reviews, addenda and review of the year. I particularly liked the photo of a Harvey torpedo, located in the Valparaiso Naval Museum.

If you enjoyed previous issues, you will like this one.

TENT, James F. *E-Boat Alert*. Airlife, Shrewsbury, 1996. 303 pages, 52 illustrations. ISBN 1 85310 792 1. Price £19-95.

(Reviewed by EUR ING David K. BROWN RCNC)

This book tells the story of E Boat operations against the Allied invasion of Normandy from the sinking of US landing ships in Lyme Bay in April 1944 to the virtual destruction of the Channel E Boat force by Bomber Command on 14 June. The book opens with a dramatic account of the attack on an invasion rehearsal in Lyme Bay, mainly in the words of survivors. The RN escort was inadequate and not kept in touch with the threat whilst the US LSTs were not made aware of any threat.

There follows an account of the history of fast torpedo boats and German ones in particular. Much attention is given to the few and not very successful German boats of World War I while the much more effective British CMBs are dismissed very briefly. However, by the outbreak of World War II, the Germans had a small number of very effective craft. Their operations in the early part of the war are outlined before the book switches to a short but well organized history of Bomber command and 617 squadron in particular.

Turning to the invasion itself, there are a number of tables showing that, in the early days, the small number of E Boats caused serious damage to the allied fleets. The raids on Le Havre put an end to this; the daylight attack was led by 22 LANCASTERS of 617 squadron, each carrying a Barnes Wallis 12,000lb TALLBOY and followed by other Lancasters with smaller but more numerous bombs, 1200 tons in all. This was followed by a night raid. As a result the Germans lost 3 small destroyers with two more out of action and thirteen E boats sunk or permanently out of action, together with numerous minesweepers and smaller ships.

The success of the E boat was largely due to its very successful and powerful Daimler Benz diesels and the author has some very interesting views on these. Production was demanding in skilled labour, in scarce materials and in specialized machine tools; at best, output was only 10 units a month. Life between major overhauls was only 400 hours. By 1944 the armament of the E boat and its electronic kit were inadequate. He suggests they should have been backed up by smaller, cheaper and more numerous craft.

The general style of the E boat may be seen as the fore runner of most current fast patrol boats and they were, in general, very good sea boats. Peter

SCOTT (*The Battle of the Narrow Seas*) makes a very interesting comparison with the D FAIRMILES which went out to receive two surrendered E boats at the war's end. The Germans had crossed the North Sea at an easy 32 knots but had to slow to 20 knots which was the best the D's could do in a moderate sea and the E boats were much drier. On the other hand, the FAIRMILES rolled much less and hence were a better gun platform with a far heavier armament.

This is an interesting book to read using sources little known in the UK — and many of the photographs are unknown and useful — but there are a number of annoying errors, mainly trivial. One in particular I must object to; an LST, designed by Rowland BAKER, would not sink if the vehicle deck was flooded.

TRAILL J.J. COMMANDER; KEMP, Paul. *HM Submarines in Camera*. Sutton Publishing Ltd 245 pages, 372 Black and White photographs, 7 illustrations. ISBN 0 7509 0875 0 Price £19.99

(reviewed by LIEUTENANT COMMANDER J.S. SHEARS Ret'd)

You don't have to be a submariner to enjoy this book. The book follows the history of submarines from 1901 to 1996, illustrated with some well chosen and very interesting photographs. The book is divided into seven chapters covering the development of the submarine from its earliest days to its present form as one of the most efficient fighting machines invented by man. There is an introduction to each chapter outlining its contents and the photographs with their text, follow the theme excellently.

One criticism is that some illustrations are reproduced too small for the integral text to be readable. Of all the photographs it is hard to pick out ones for particular comment, but this reviewer can not resist a challenge. Any aviator will be glad to see the practice torpedo embedded in the casing of HMS *Walrus* and anyone who likes those bad old science fiction films, have a look on page 139 at the crew of a 'C' class submarine in their Rees-Hall escape suits. If you think that things have progressed over the years, then the authors tell you to compare the photograph of a TIGERFISH being loaded with that of a 21 inch torpedo being loaded into H43 at Portland in the thirties. Finally, through out the book the authors remind the reader of the sacrifice made by the crews, and this is brought home by the picture of HMS *Pandora's* water polo team in 1936. Of the nine men in the photograph only three were to survive the war, the remainder being lost in several different boats.

WATKINS, David. *DeHavilland Vampire. The complete history*. Sutton Publishing Ltd 1996. 271 pages. 226 pictures. 13 illustrations. ISBN 0-7509-1250-2. Price £25.

(reviewed by LIEUTENANT COMMANDER J.S. SHEARS Ret'd)

There can not be many facts about the VAMPIRE that this author has left out from this excellent reference book. Because of this it is not what can be described as a 'light' read as nearly every page contains facts such as aircraft and squadron numbers etc.. Also a basic knowledge of aerodynamics is quite useful when he starts talking about tailplane chord, aircraft compressibility characteristics etc.. The VAMPIRE must be considered one of England's success stories with 3,269 built at home and a further 1097 under licence abroad. On top of this the aircraft was to be in service for 46 years. This remarkable aircraft would achieve many firsts, being the first jet fighter:

- To cross the Atlantic
- To land on an aircraft carrier
- To equip post-war reserve squadrons

- To fly formation aerobatics
- To enter FAA Service
- On which students actually qualified for their wings

Also a suitably modified VAMPIRE set a new world altitude record in April 1948 and others were used for the development of the RN Deck Landing Mirror Sight.

There are 13 chapters, each dedicated to a specific subject, with chapter 1 starting with the 'airframe development'. 2 prototypes were ordered, at a cost of £40K, on 11 April 1942. The airframe was to be part wooden and metal construction, using DeHavilland's experience with the MOSQUITO. The 1st prototype flew on 20 September 1943, the aircraft being officially called the VAMPIRE in April 1944 with a contract for 120 being placed on 13 May 1944. On 27 April the first production aircraft flew with the first RAF Squadron 247, which formed in March 1946. (Makes modern lead times etc. look rather sad!).

Chapter 2 deals with the GOBLIN development. Again lead times impressive, with the first engine running 248 days after the first drawings were produced. Another success story with 2,688 engines being bought. Chapter 3 discussed the NENE engine development and the troubles encountered with the intakes. To gain the extra air required elephant ears were fitted on the top of the airframe, but these caused unacceptable handling characteristics at high Mach numbers. When fitted on the underside, there was no marked improvement and in fact were excellent vacuum cleaners when on the deck. Although the UK decided not to fit the NENE, some countries did.

The next eight chapters deal with the different variants starting with the swept wing variant, the DH108. All three built were to eventually crash killing the pilots. Then onto the VAMPIRE Mk3 which on 1 July 1948, 6 aircraft from 54 Squadron made the 1st Atlantic Crossing.

Two were then taken out to the Far East for Tropical trials. One was left outside to weather and to see if there would be any effect on the wooden construction, whilst the other flew around the Far East giving demonstrations and entering into 'Boys Own' antics. Having been unable to land at Hong Kong due to the weather and running out of fuel, the pilot descended through the clouds and much to his surprise found a sandy beach on which to make a safe landing. Unfortunately it was Pirate territory and so a SUNDERLAND had to land off shore as a deterrent whilst HMS *Belfast* steamed on to the scene. Eventually the aircraft was recovered via landing craft and taken back to Hong Kong, where after minor repairs it flew again in a few days. This was bettered by 73 Squadron on their Italian demonstration. Having got lost all 4 aircraft crash landed, with no pilot being hurt. Not being deterred, another flight of 4 were despatched, with one crashing at Milan. Despite this the Italians placed an order, maybe being impressed with the aircraft's strength!

VAMPIRE's were soon to be outclassed as a pure fighter by the METEOR and so it found its mark as a ground attack/fighter and so the FB5 was born. Attempts were made to fit an ejector seat, but this was not successful with the original Martin Baker seat. But the work carried out did allow them to be fitted into later marks and the VENOM. Over 1000 FB5s were built. Next was the FB9, which basically was a FB5 with some form of cooling for the aviators while operating in the Middle and Far East.

The VAMPIRE NF10 was a private venture by the company. The RAF was waiting for the METEOR and VENOM and DeHavilland saw a gap. By redesigning the cockpit, they achieved a similar layout to the MOSQUITO but again no ejector seat. Low level intercepts at night over the North Sea with only a pressure altimeter, was not really a satisfactory way of earning a living. As it

was by definition a stop gap machine, the aircraft were soon delegated to navigation training.

The VAMPIRE T11 incorporated a modified cockpit from the NF10, but this time they were able to get the instructor and pupil side by side. Ejection seats were fitted, never really popular in that they were hard to strap into and made the cockpits cramped. 526 were built for the RAF and on the 1 November 1955 the first successful ejection was made. The first production T11 flew on 19 January 1952 and the Swiss retired the aircraft on 12 June 1990. The aircraft introduced a radical change to training in that it became an all jet course. At the same time it proved a very good weapon based on that both student and instructor were looking at the same thing. As for the argument whether student and instructor should sit side by side, well this has been going on since that day!

On 3 December 1945 LIEUTENANT COMMANDER Eric 'Winkle' BROWN made the 1st ever deck landing of a pure jet on HMS *Ocean*. As he had stated that it would be too difficult for the average pilot, Boscombe Down were asked in the Spring of 1946 to give a second opinion. Having changed the technique to a straight approach etc. they concluded that provided the right techniques were used there was no problem. During the next six months further trials were undertaken, but because of the critically slow engine acceleration response and limited fuel capacity, it was decided that the VAMPIRE would never be a front line naval fighter. But the Navy was interested in acquiring the aircraft as a cost effective means of introducing its pilots to Jets so on 21 March 1947 an order was placed for 18 SEA VAMPIRES. Delivery began on 6 October 1948 and ended in July 1949.

In May 1947 an aircraft was converted for the flexible deck trials on HMS *Warrior*, the first landing being made on 4 November 1943. For the period of the trial 200 successful landings were undertaken. Despite the end of this trial, in 1953 a suitably modified SEA HAWK made the one and only successful landing without an undercarriage which shows it takes a long time to finally kill off a mad scheme! Also in May 1952 SEA VAMPIRES were involved in the Deck Landing Mirror System trials and this was used for the 1st time at sea in November 1953 on HMS *Illustrious*. In 1953 the Navy placed an order for 53 SEA VAMPIRE trainers (T.Mk22) with the last one being operated by the RN in July 1970.

The chapter on foreign sales gives a comprehensive list of all countries where VAMPIRE's were ordered, built under licence or in some cases delivered via the back door. At £20K for a FB5 it must have been a bargain! The final chapter is a few anecdotes from the cockpit. It also includes 4 photographs of crashed VAMPIRE's, from which the pilots had walked away. The one fact missing from the book (or which this reviewer couldn't find) is how many did crash and how many fatalities. The final anecdote in the chapter is from LIEUTENANT COMMANDER PURVIS describing how he was the 3rd and last pilot to ditch a VAMPIRE and survive.

Finally there are 39 pages of Appendices listing numerous facts.

This book is thoroughly recommended as both a reference book and an insight into a true success story of its era. As usual this reviewer likes to pick out his favourite picture, and this time it must be one for the Health & Safety Executive. On page 7 there is a photograph of one of the 1st ground runs of the GOBLIN. One can tell the engine is running by the fact a few people at the entrance to the hangar have their fingers in their ears. This cannot be said for the men around the aircraft, especially the one leaning against the airframe nonchalantly peering into the engine bay!. Wonder when he went totally deaf ?