BOOK REVIEWS

DANIEL R J. *The End of an Era*. Periscope Publishing, Penzance. 370 pages, 1 photograph. ISBN 1-904381-18-9. Price £17-99 (Soft back). (reviewed by Eur Ing David K. Brown, RCNC)

In July 1941, the then Head of the Royal Corps of Naval Constructors (RCNC), Sir Stanley GOODALL, having interviewed his students noted in his diary,

'DANIEL good...'

This autobiography tells how his promise was fulfilled; it is a fantastic story. We jump in at the deep end with wartime trials on submarines which the author splits his activities into three. One third on trials at sea, mainly in Scottish waters, with all the horrors of wartime travel; one third completion inspections and dockyard trials and one third at his desk. Then came an appointment to the Eastern Fleet as Assistant Fleet Constructor based in Trincomalee. The main problem was sorting out many ships' ventilation systems. These had been barely adequate in temperate waters as designed but fans running the wrong way round, gas flaps closed when they should be open and ducts blocked by old socks made conditions much worse.

At the end of 1944 DANIEL was promoted to Constructor Lieutenant Commander and sent to join the British Pacific Fleet with a trouble shooting role. With the Japanese surrender he was sent to report on the damage to Hiroshima and Nagasaki armed with copies of his orders in triplicate in US format. His reception was mixed many were helpful, others not. He was the first Briton to see the results of an atom bomb but on return to Whitehall his report was received with a considerable measure of disbelief. However, this experience was instrumental in his appointment as part of the British team attending the Bikini trials. The US pressure gauges were mainly directional and were near useless when the airburst bomb was dropped in the wrong place. The British team relied on measurements of the crushing of oil drums – also six beer cans personally emptied by DANIEL.

Returning to the UK, DANIEL became Professional Secretary (Staff Officer) to the Director of Naval Construction, Sir Charles LILLICRAP, in 1947. This leads to a fund of anecdotes concerning politicians, admirals and senior constructors. A good Staff Officer can be invaluable – I wonder if the author realises how helpful his assistant was in later years. Early promotion came in 1949 with a return to Bath in charge of an aircraft carrier section mainly concerned with the HERMES class. It was a time of great changes in aircraft which were getting bigger and faster, propellers gave way to jets and tail wheels totricycle undercarriages all bringing problems to the ship designers. After a short appointment to a Standards section came a move to cruiser design involving the monstrous SEA SLUG missile.

When the big cruiser died the design team became the nuclear submarine team overnight. This was perhaps the high point of DANIEL's career but was interrupted by two other appointments, which deserve brief mention first. In 1958 there was a new organization forming the Admiralty technical departments into a new Ship Department. Within this there was a project group to develop design studies in a two way dialogue with the staff. The post called for imagination and lateral thinking as well as technical knowledge; qualities which DANIEL possessed in abundance. There is an inside account of the bitter wrangling over the Type 21 design and the more friendly arguments with the Dutch over a proposed common frigate which ended up as the RN Type 22. Then an appointment to the Royal College of Defence Studies for high flying service officers and civilians including some from overseas. Back to Bath and a period in charge of organic materials including the new plastic MCMV. There were major – and expensive – problems with all types of paint and corrosion protection.

When DANIEL took over the nuclear submarine design section he was responsible for three main projects; Dreadnought with the US S5W reactor, Valiant and the Dounreay shore based submarine prototype, all with different problems. Valiant had been the first all British SSN design but to get a nuclear submarine into service quickly arrangements had been made to buy a US reactor. arrangement was largely due to ADMIRAL RICKOVER USN to whom DANIEL gives unstinted praise. A nuclear submarine is very different from earlier battery submersibles. The large diameter hull is liable to low cycle fatigue failure, there are many cooling systems exposed to full diving pressure with problems in the choice of material and of jointing and with hull valves to withstand shock. All these and others such as air purification required the talents of many staff, named in the book. The overall programme was directed by the ribald Rowland BAKER whose leadership is acknowledged. At the end of 1962 DANIEL's appointment as Professor at the RNC Greenwich was cancelled and he became head of the POLARIS submarine design team. Problems foreseen were maintaining a steady depth while launching sixteen 20 ton missiles, secure communications and silence. All these problems and others were solved and, towards the end of the programme a USN admiral said that there were five features of the British SS(B)N which he envied – a 3ft diameter access hatch in the machinery, the hovering system, welded hull valves, standardized valves and the raft mounted machinery. All these submarines (NOT Dounreay!) completed on times and on cost thanks to the talented engineers in charge, something which the more sophisticated management systems of today seem unable to achieve.

DANIEL sums it up,

'With a team of gifted colleagues, I had been responsible for the design and construction of two generations of British nuclear submarines, five classes, which were better and orders of magnitude safer than any submarines that had gone before in the Royal Navy.'

But no one thanked him.

In 1974 Daniel was promoted to Director General Ships (DGS – Later re-titled Deputy Controller Warships) and Head of the RCNC. A further honour came in 1976 when he married Liz. This chapter of the book is mainly the high level manoeuvring for senior posts. Daniel particularly regrets the demise of the Royal Naval Scientific Service, a body of dedicated scientists responsible for fundamental research supporting the design of ships and weapons. Passing paper in Whitehall won promotion more quickly than research.

DANIEL describes his move to British Shipbuilders as the second most stupid thing he did in his life. It is an intriguing story but this review is overlong and this section 'The Wasted Years' may be of less interest to readers. DANIEL describes the in-fighting between Board members and some of their foibles. There are detailed accounts of attempts to sell submarines to Australia and to Canada and the lack of support from ministers and naval officers.

The book was written almost entirely from memories and there are a few minor slips – FROUDE died 14 years before the RCNC was formed etc. It is a fascinating book, essential for any study of post war naval planning and a good read – I stayed up late two nights for any study of post war naval planning and a good read – I stayed up late two nights running because I could not put it down. And what a career!

HILL Michael. *Duty Free*. Hovellers Press 2003. 214 pages (paperback). ISBN 0 954 6101 1 3. Price £8.99 (reviewed by John SHEARS)

In this excellent book the author describes his experiences as a FAA pilot during the 2nd World War. It is very well written, no holds barred book, which describes life as a twenty year old going to war. Although there are plenty of names mentioned only the Christian and nicknames are given, which must save some people's blushes!

After training he is selected for the 'Fighter Pilot' stream and eventually joins 808, initially equipped with SPITFIRES and then SEAFIRES. He doesn't embark with the squadron, as during his time they are employed in supporting the Normandy Landings.

He then undertakes a 'Batting Course' and eventually serves in several Escort Carriers on the Russian Convoys. His accounts of these convoys are the most riveting, but again they are mixed with a great deal of humour. Eventually he gets back to flying, again SEAFIRES, this time from *Indefatigable*. He joins the ship in Australia, having left the UK after VJ day. Throughout the book there is the odd mention of a party or two and one can only imagine the feelings of the crews that had survived the war and were waiting to go home. As the reviewer has spent some time with Flight Safety and the Accident Investigation Unit, I can not recommend this publication as a reference book!

Midst the humour the author deals with death in a way that only those who were there could, i.e. in a somewhat blunt but sensitive manner. This is well illustrated when he hears of the death of an old friend in a FIREFLY from *Glory*.

A good read and thoroughly recommended.

HOBBS, David, MBE, Commander. *Royal Navy Escort Carriers*. Maritime Books 2003. 232 pages, 213 photographs, 2 Illustrations. ISBN 090 777199 8. Price £19.95.

(reviewed by John SHEARS)

This is an excellent reference book on these important ships that played such an important part in winning the 2nd World War. The book contains a history of each of the 45 ships that were listed as Escort Carriers. They were divided into the following classes:

CLASS	Number of Ships
AUDACITY	1
ARCHER	5
ATTACKER	11
RULER	23
ACTIVITY	1
CAMPANIA	1
Nariana	2
PRETORIA CASTLE	1

The author's introduction explains the need for these carriers and their introduction into service. As some were converted from mechantmen as opposed to purpose built American ships, it explains the one off class! It is fascinating to read the individual histories of the ships and how some seemed to be involved more than others. For instance *Emperor* appears very busy, whereas *Patroller* as an Ferry/Troop ship covered a lot of miles.

The photographs are excellent and well chosen. They range from the conventional 'ship shot' to interior views and the odd close encounter (Khedive and a destroyer). Also there are several of rough weather and if I had to choose a favourite, then *Vindex* escorting JW66 to North Russie in my view comes first.

The picture of an AVENGER going down *Queen*'s Forward Lift, demonstrates what a tight fit the handlers had to cope with. Three carriers were lost - *Audacity*, *Avenger* and *Dasher*. *Audacity* proved the concept and had a short but highly successful career until three torpedoes hit her from U-751. There were only 17 survivors from *Avenger* when she was torpedoed by U-155 and sank in less than 5 minutes. 149 survived *Dasher* when she sank in 3 minutes after a massive internal explosion. 2 were damaged by torpedoes *Thane* and *Nabob* and once again there are good photographs of both ships, especially of the shoring in *Nabob*.

An excellent book, thoroughly recommended and good value for money.

MEEK, Marshall. *There Go the Ships*. The Memoir Club, Spennymoor, 2003. 286 pages, 29 photographs. ISBN 1841040452. Price £17-50. (reviewed by Eur Ing David K. Brown, RCNC)

This is the professional life of Marshall MEEK, which he divides as; Shipbuilding 1942-49, R&D 1949-53, Shipowning 1953-78, Shipbuilding 1978-84, R&D 1984-86. He became an apprentice at Dundee in 1942 and graduated from Glasgow University in 1946. In 1949 he joined the British Ship Research Association (BSRA). It was at a time of many new ideas and BSRA attracted many bright young men. Despite some good work on propeller induced vibration, MEEK decided that research was not his line.

In 1953 he became assistant naval architect to the Blue Funnel line which had strong traditions dating back to its founder, Alfred HOLT. In particular there was an emphasis on safety, which had come to be equated to conservatism. MEEK became chief naval architect in 1961 naming *Centaur* as the first ship for which he was responsible followed by the *Priams*.

But a new age was dawning, that of the container ship. These ships posed very difficult design problems as the large hatchways left little deck to resist torsional loads. However, MEEK's six ENCOUNTER BAY class had service lives of up to 30 years. Five were built in Germany and completed on time; the single ship built in the UK was a year late. Reactionary attitudes of both management and labour, in shipbuilders, ship owners and ports, form a central theme of the book. The bigger LIVERPOOL BAY ships, which followed, were even more successful. In 1978 MEEK was invited to become technical director of the nationalized British Shipbuilders. There was a gleam of hope but soon killed by the reluctance on all sides to adopt new procedures.

MEEK's connection with warships came through membership, later chairman, of the Hull Committee of the Defence Scientific Advisory Committee. There is a lengthy account of the debate over the 'Short Fat Ship' proposal. Your reviewer was present at most of the meetings described in the book and can vouch for its accuracy. In later years Marshall MEEK served his profession in various posts

notably as President of the Royal Institution of Naval Architects. It is clear that his happy family life contributed much to professional success.

This book gives a remarkable inside view of the collapse of British shipbuilding and shipowning and is very readable.

PATERSON, Lawrence. *U-Boat War Patrol*. *The Hidden Photographic Diary of U564*. Greenhill Books, 2004. 206 pages. 251 photographs. ISBN: 1-85367-575-X. Price £25.

(reviewed by Iain HIME)

This book is unique. It tells the story of U-564, on a single patrol in 1942 across the Atlantic and into the Caribbean, through the eyes of a photographer sent on board by ADMIRAL DONITZ to record the exploits its Captain, Reinhard 'Teddy Suhren. The photographs were looted in 1945 from the submarine pens in Brest and spent the next 55 years or so languishing under a bed in a shoebox. As luck would have it some of them surfaced in a village post office where the owner recognized their historic value. He eventually recovered 361 of them and in the course of his research contacted the Submarine Museum at Gosport where the author became involved. This book is the result.

Teddy SUHREN was an unlikely propaganda role model for 1942 Germany. His irrepressible sense of humour, open disregard and near contempt for authority did not sit well within the Reich. However he combined a natural fighting instinct with superb leadership and in the submarine service had come under the protection of ADMIRAL DONITZ. As this story starts he has already, at the age of 26, completed 5 transatlantic patrols and accumulated an impressive (if grim) tally of successes.

Just to confuse things, U 564 sailed on 11 July in company with U 654 and 8 days later SUHREN found his first targets in convoy OS34 bound for the South Atlantic, and the Caribbean. And so the story unfolds: and this is a two-sided battle with a number of attacks from escorting destroyers and aircraft. PATERSON has an easy style of writing and his very comprehensive research of this tale allows us to become intimately familiar with the U-boat's crew, their success, fears and the privations they suffer. Without a single photograph this book would be a thriller. Add them and it becomes a classic: you become part of the story. It is almost like reading a video so clear are the overall impressions of life onboard.

Anyone with any interest in submarine warfare and what it means at a personal level will appreciate this book: anyone intrigued by human nature will also enjoy it. And guess what? If you changed the names from SCHMIDT to SMITH and called the boat HM Submarine you too would end up feeling proud of a crew that caused such mayhem to the enemy.
