

# ADMIRALTY PUBLICATIONS

BY

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So technical and scientific has naval warfare become that nowadays some 200 manuals and handbooks for the use of naval officers and men have to be written or rewritten every year.

Fifty years ago the prime requirement of every officer and man was still that he should be a good seaman. The quarterly gunnery practices—firing at a fixed target at point blank range—were generally regarded as a nuisance to be got over as quickly as possible. Fleet communications had hardly advanced since Nelson's time, and strategy and tactics were left to the whims and rule of thumb methods of individual Flag officers who had no staffs to assist them.

The limited theoretical instruction then necessary was given by lectures at the navigation, gunnery and torpedo schools, while training consisted mainly of the enforcement of strict discipline and the execution of frequent competitive drills. True, every junior officer had to learn theoretical navigation as well as practical pilotage, but unless he specialized as a navigating officer he seldom had even to take a sight once he had passed his promotion examination for Lieutenant.

### **Few Books Required Fifty Years Ago**

Fifty years ago, therefore, few naval manuals and text-books were required. There was little more than the *Manual of Seamanship*, mostly written in the days of sail, the *Handbook of Pilotage*, *Inman's Nautical Tables*, *The Queen's Regulations and Admiralty Instructions*, a *Steam Manual* and the *Admiralty Sailing Directions or Pilots*, which still gave detailed directions for negotiating harbours and channels under sail. There were also gunnery drill books for the different types of turret, 6-in. and small quick-firing guns, and a *Field Training Pocket Book* from which officers and gunner's mates learnt to drill their men on parade grounds Army fashion, and carry out the correct ceremonial procedure at funerals; but these so-called pocket books were usually bound in sharp-cornered stiff boards just too large to fit the pocket.

### **Lack of Books in 1914**

Even at the outbreak of the First World War the battle orders for the Grand Fleet were printed on a single sheet of foolscap, and there were still no standard works on naval strategy and tactics, or the science of naval war. The gunnery, torpedo and wireless manuals of 1914 were badly written, inadequately illustrated and difficult to follow. There was little, in fact, to guide a ship's officers, artificers and armourers in the maintenance of their now complicated weapons, so that breakdowns in hydraulic and electrical machinery were frequent. Centralized (Director) control of gunfire was barely beyond the experimental stage, and there was as yet no standard work on this vital subject.

As the war developed, however, sheer necessity forced us to remedy these serious defects. A naval staff with separate planning and operational divisions was created at the Admiralty. The Anti-submarine Division to deal with the U-boat menace was added later; and then came the Training and Staff Duties Division, whose task it was to organize the training of the newly created operational and administrative staffs for each command ashore and afloat, and, one might almost say, to teach the Navy how to think.

### **Lessons Learnt from the First World War**

With the coming of peace and a full realization of our nearness to defeat by the U-boat in 1917, the Board of Admiralty and its Naval Staff were able to take stock of our shortcomings in the higher direction of naval war. A Naval Staff College, on the lines of the Army's 50-year-old establishment at Camberley, was founded at Greenwich for training future naval staff officers in their duties. Numerous manuals, text-books and reports were ordered to be written so that the results of recent technical development, and the wide experience gained of every side of naval warfare, could be recorded and passed on to the rising generation. One of the most important of these books was the *Cruiser Manual*, the first official text-book on the art of naval war to be issued by the Lords Commissioners of the Admiralty for the guidance of the Fleet.

In the years between the two World Wars hundreds of official naval books were written, and with every new technical and tactical development still more were required. So rapid was development, moreover, and consequently so numerous the amendments required to keep the books up to date, that every ten years or so many had to be entirely rewritten.

### **Lack of Experienced Authors and Illustrators**

Almost any naval officer was expected to be able to write a manual, provided he knew his subject, in his spare time while serving at the Admiralty or in one of the specialist schools, or while 'standing by' for a new ship being built. He usually had no experience as an author, and often lacked the necessary facility for conveying his meaning clearly and unambiguously to the readers who did not already know the subject dealt with. There was no proper liaison between author and publisher. The few illustrations there were in the books giving instructions for the maintenance of the Navy's complex weapons were usually supplied by the makers, and being copies of the draughtsman's drawings from which the weapons were actually made they were usually unintelligible to the ratings who had to work and maintain them.

There was also no continuity in authorship. The gunnery officer standing by a new ship in her building yard would be detailed to write, say, the handbook for the new type of turret guns she mounted. Long before the book was finished his ship would be commissioned and he would sail with her, and another officer would be detailed to finish the book.

### **Great Improvements in Second World War**

Such was, in fact, the position up to the early part of the Second World War. So rapid then became technical development that special Book Writing Sections had to be established at the Navy's gunnery, torpedo, electrical and navigation schools. In charge of each was a retired regular naval officer of the specialist branch concerned; but his staff consisted mainly of technical authors and illustrators from the commercial world, who were given temporary commissions in the Royal Naval Volunteer Reserve.

Under these conditions the standard of our books greatly improved. They were more clearly and concisely written, and a new technique of illustration known as 'exploded perspective' was introduced. By this method the whole guts of the most complicated mechanism could be exposed and shown as they would appear were you able to see inside; and each separate system in the mechanism was coloured functionally (instead of metallurgically as in the draughtsman's drawing) to assist in interpreting how the whole worked. Another advance was that a better liaison was effected with the publishers, H.M. Stationery Office, so that a more suitable binding and format could be obtained for each type of book. Pocket books, for example, were now of a size that really went into the pocket, and a signal book would lie flat and *stay open* at the page desired so that the signal could be interpreted, answered and obeyed immediately it was hoisted by the flagship.

### **Formation of Admiralty Book Editing Section**

When the war was over the experienced authors and illustrators in the Book Writing Sections started to return to their civilian posts. Their places had to be filled by regular naval officers and dockyard draughtsmen. The former lacked experience as authors and the latter knew little or nothing of those modern techniques of illustration which were so essential for showing how to use and maintain a weapon or mechanism instead of how to make it.

This depletion of authors and illustrators took place, moreover, at a time when, as after the First World War, there was a mass of new information and experience to be collated, recorded and printed for the use of the rising generation of officers and men. Such work was not confined to the specialist schools ; much of it would have to be done by the naval staffs of the different Admiralty divisions and departments who still had no facilities for writing and illustrating books.

In 1946, therefore, a central Book Editing Section was formed at the Admiralty as part of its secretariat. The Head and Deputy Head were both senior retired Commanders ; the former was in charge of H.M.S. *Excellent's* Book Writing Section throughout the war, and the latter had been the Navy Weeks and Recruiting Publicity Officer at the Admiralty, and then a naval correspondent. Under them worked a very experienced supervising technical illustrator and four fully qualified sub-editors.

The duties of this section were to guide and co-ordinate the work of the Book Writing Sections at the specialist schools, to assist the authors of books written at the Admiralty and in other naval establishments which had no book writing facilities, to edit, illustrate and prepare the manuscripts for the printers, and then to co-operate with H.M. Stationery Office in getting each book published in the most suitable form.

Now, when a naval officer is detailed to write a book he first discusses the project with the Book Editing Section,\* and then has their experienced assistance and advice throughout the whole process. In addition, H.M. Stationery Office, as the publishers, now have a centralized organization to deal with, instead of a number of far distant book writing organizations and individual authors, each clamouring for preferential treatment, both as to quality of production and priority in date of publication. This centralized organization has, moreover, resulted in great economies in public expenditure.

### Recent Development

Introduced in 1946 on an experimental basis, the Book Editing Section has proved its worth, become securely established, and is editing upwards of 200 manuals, handbooks, text-books and other official publications every year. Many of these books are entirely new, the *Submarine Manual*, the *Naval Staff Histories* of the naval campaigns and battles of the late war, and the numerous handbooks on radar and the naval air arm being typical examples. Others are old books being entirely re-written and much expanded to bring them up to date. An example of the latter is the new *Manual of Seamanship*, which consists of three large and copiously illustrated volumes in place of the former two, and includes many chapters on entirely new subjects.

Within the past three years the new grade of Technical Illustrator has been introduced on a permanent basis into the Service. A dozen are attached to the Book Editing Section for illustrating books written at the Admiralty, and some 80 more are divided amongst the Book Writing Sections of the gunnery, torpedo, navigation and direction, and electrical schools. More recently 20 Technical Authors have been appointed especially for the continuous writing of the Navy's gunnery, torpedo, engineering, electrical and radar books. They are mostly retired naval officers of the specialist branches concerned and have previous experience as authors. As yet in its infancy, this scheme is successful and the branch is now expanding.

As a result of these post-war innovations the Navy's books are now well and concisely written, clearly and legibly laid out and printed, suitably bound to

stand up to hard usage and admirably illustrated. The instructions and information they contain are thus easily and quickly understood by the reader—a matter of no small importance nowadays when naval officers and ratings have to absorb such a mass of complex, technical information, both while under training and when serving at sea.

*\*Note—For the Engineer-in-Chief's Department this function is carried out by Inspector 'Publications' and Head of Book Writing Section who acts as liaison with Book Editing Section. This ensures standardization of E.-in-C.'s requirements and saves Book Editing Section unnecessary interruption.*

*The 'Revised Procedure for the Preparation and Printing of Technical Handbooks—Engineer-in-Chief's Department', E.-in-C. Library No. 8.08.R2, has been founded on the new basic organization described above.*